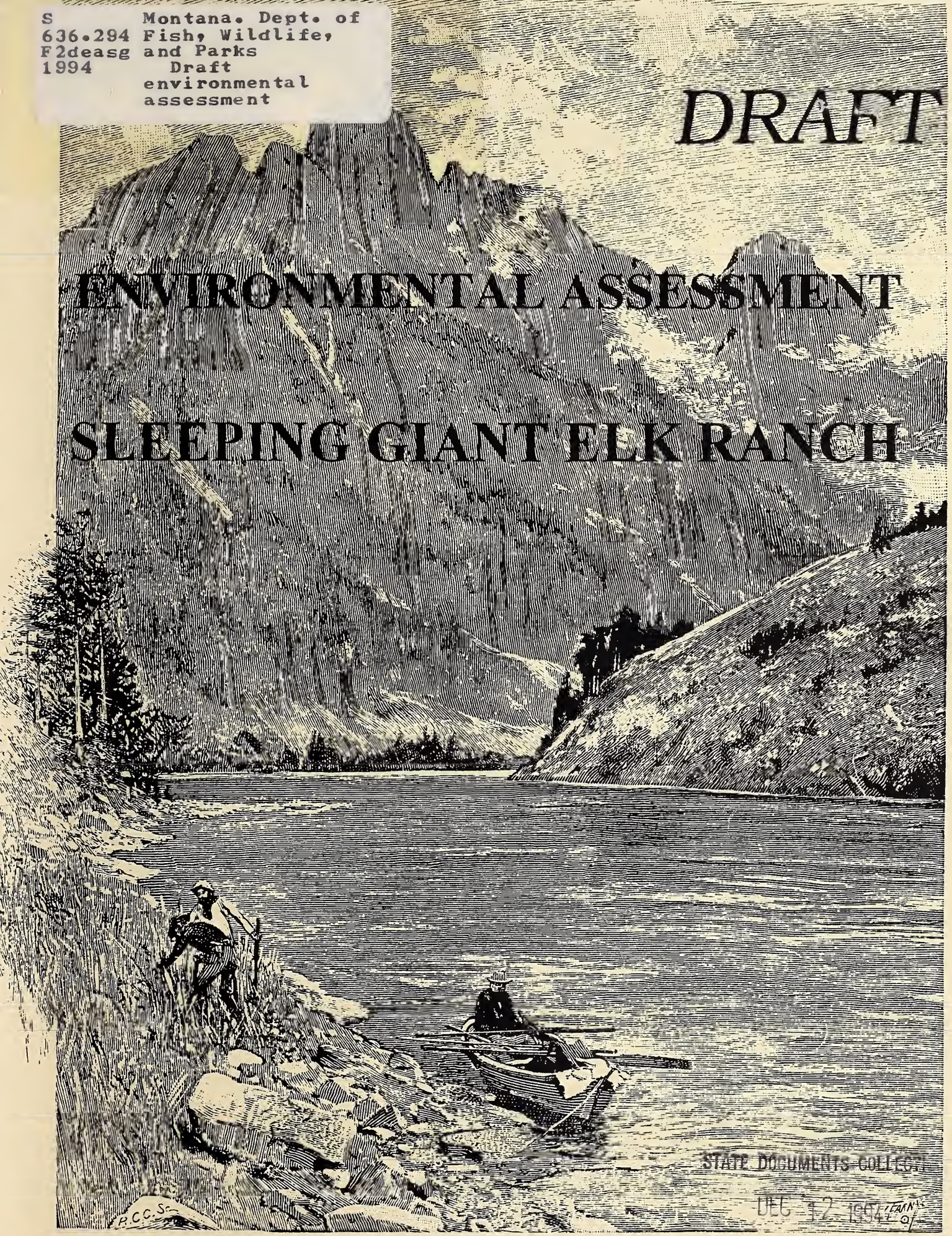
S
636.294
F2deasg
1994
Montana. Dept. of
Fish, Wildlife,
and Parks
Draft
environmental
assessment

DRAFT

ENVIRONMENTAL ASSESSMENT

SLEEPING GIANT ELK RANCH



STATE DOCUMENTS COLLECTION
DEC 12 1994
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

SEPTEMBER 26, 1994

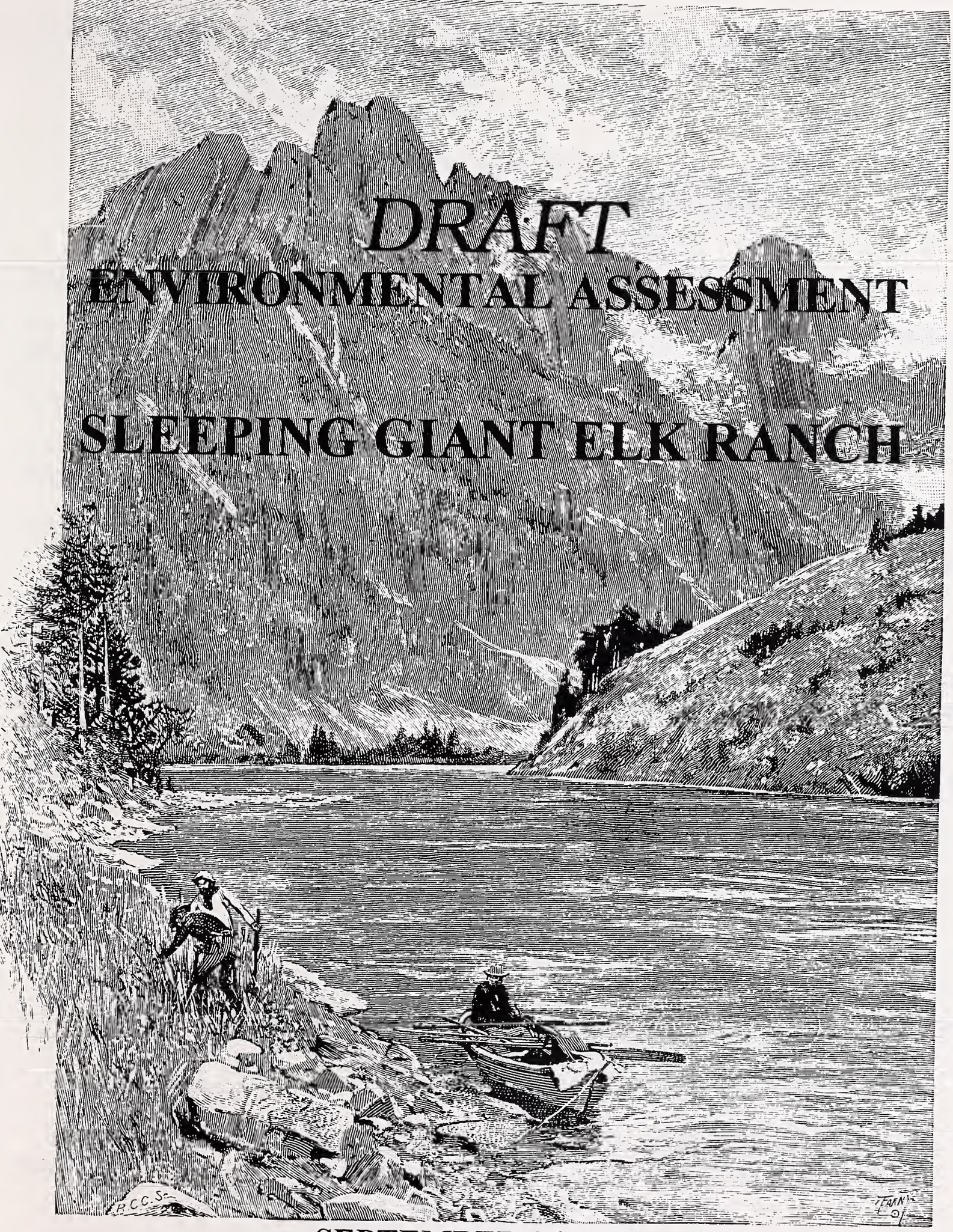
MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS

PLEASE RETU

AUG 2 5 1997

Sept 22, 1997

MONTANA STATE LIBRARY
S 636.294 F2deasg 1994 c.1
Draft environmental assessment :Sleeping
3 0864 00091567 1



DRAFT
ENVIRONMENTAL ASSESSMENT
SLEEPING GIANT ELK RANCH

SEPTEMBER 26, 1994

MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS

EA Checklist
For Game Farm License Applications

PART I. GAME FARM LICENSE APPLICATION

The department's authority to regulate game farms is contained in sections 87-4-406 through 87-4-428, MCA and ARM 12.6.1501 through 12.6.1519 (Appendix A).

1. Name of Project: **SLEEPING GIANT ELK RANCH**

2. Name, Address and Phone Number of Applicant:
Hugh D. Guthrie, 4311 Dunmore Ave., Tampa, FL, 33611. (813) 837-9146.

3. If Applicable:
Estimated Construction/Commencement Date: **Immediately upon license approval.**

Estimated Completion Date: **Unknown.**

Is this an application for expansion of existing facility or is a future expansion contemplated? **This is not an expansion of an existing facility. It is not anticipated that the Game farm would be expanded beyond the proposed 280 acre facility.**

4. Location Affected by Proposed Action (county, range and township): **Lewis and Clark County SW 1/4 Section 16, Section 21 of Township 13 N R 3W.**

5. Project Size: Estimate the number of acres that would be directly affected that are currently:*

(a) Developed:
residential... **1 acre**
industrial.... -0- acres

(b) Open Space/Woodlands/
Areas..... **260 acres**

(c) Wetlands/Riparian
Areas..... **4 acres**

(d) Floodplain... **4 acres**

(e) Productive:
irrigated cropland... -0- acres
dry cropland... -0- acres
forestry... **200 acres**
rangeland..... **20 acres**

other..... -0- acres

*figures not confirmed

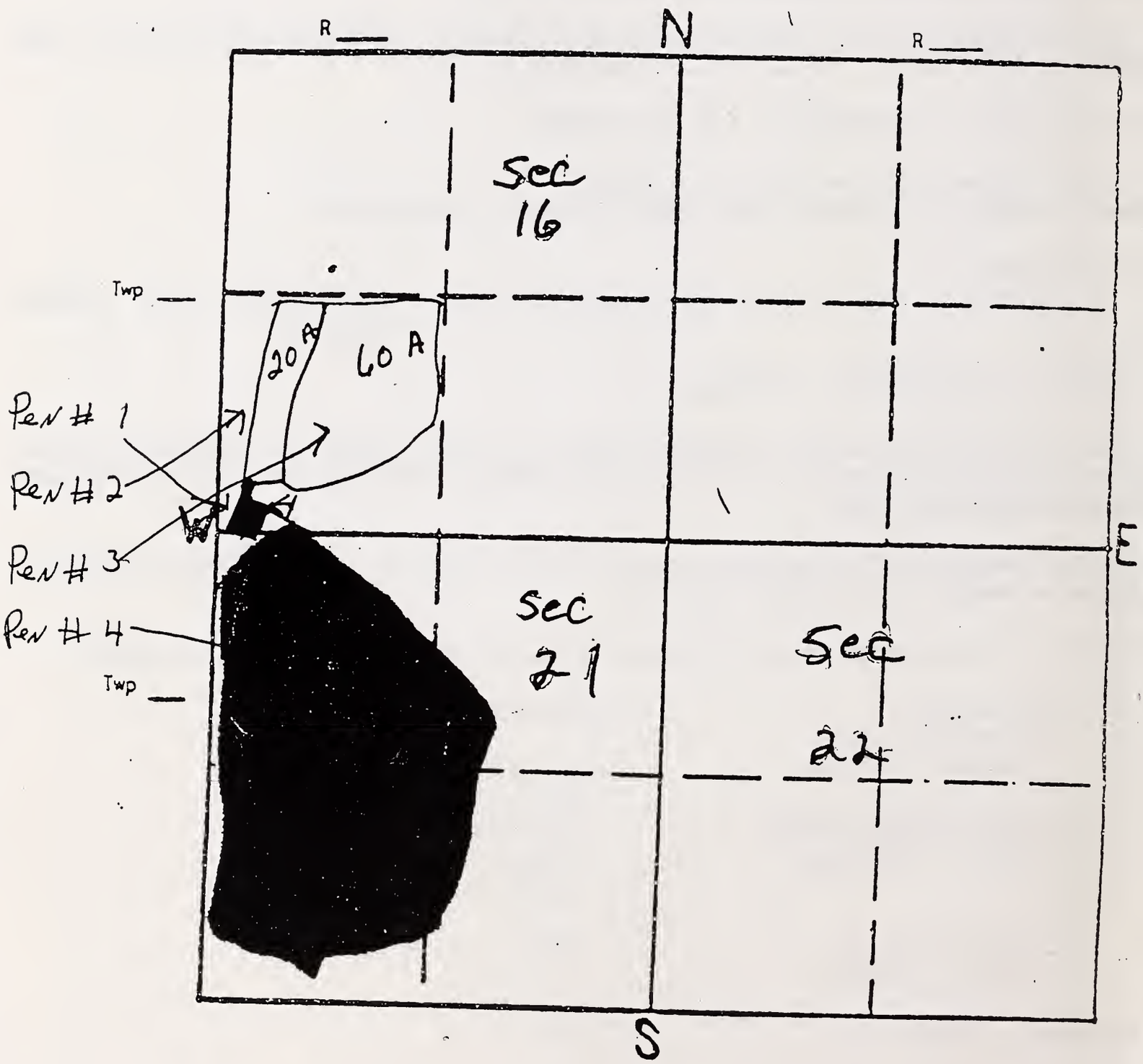
EXHIBIT

"A"

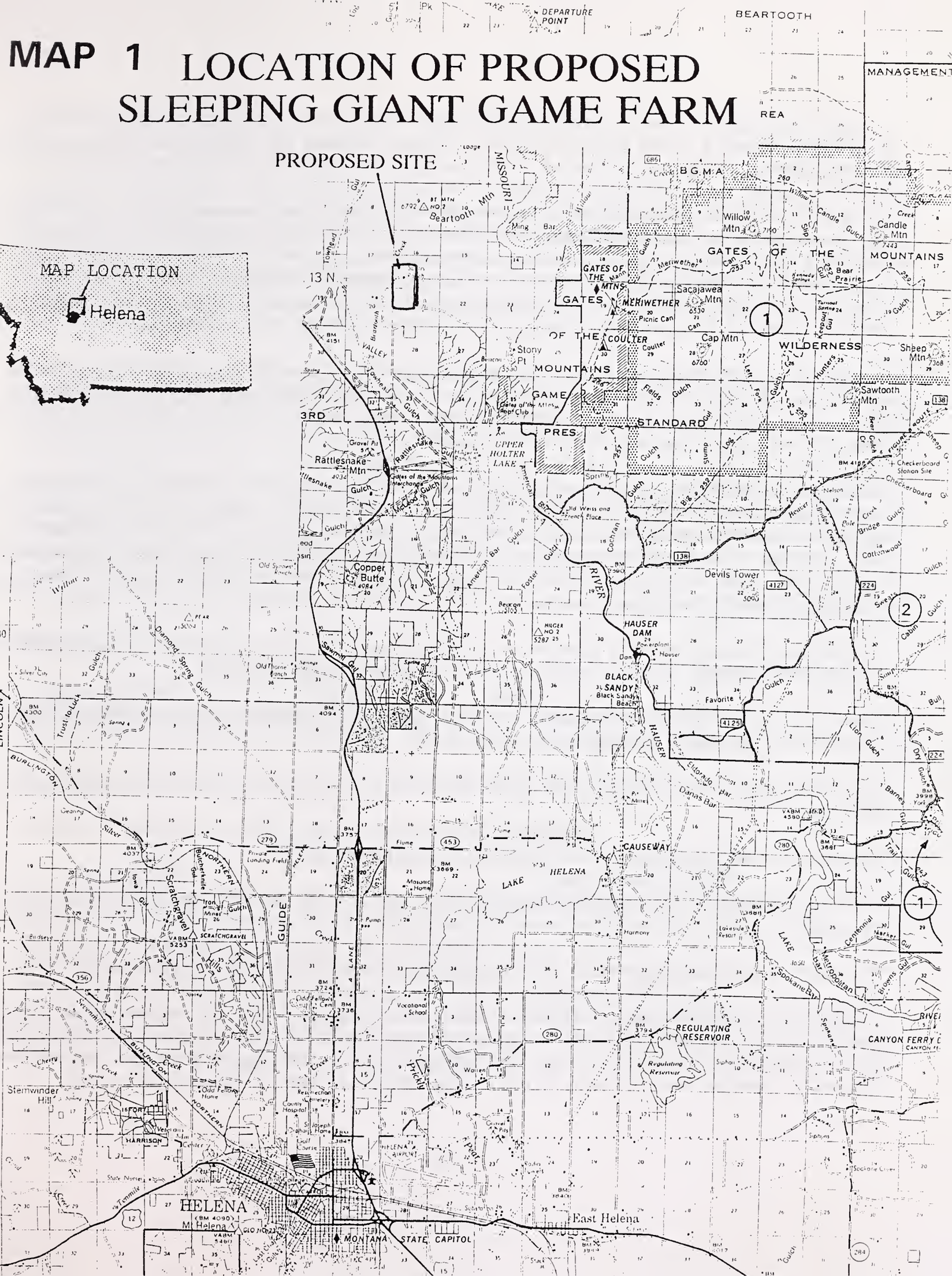
6. Map/site plan:

Scale 1" = ¼ section

Large square represents 4 section(s)



MAP 1 LOCATION OF PROPOSED SLEEPING GIANT GAME FARM



7. Narrative Summary of the Proposed Action or Project including the Benefits and Purpose of the Proposed Action.

On April 14, 1993, Mr. Hugh Guthrie's application for a game farm license was accepted as complete by the Montana Department of Fish, Wildlife and Parks. Mr. Guthrie's application proposed to keep elk for a breeding and velveting operation as well as operate a shooting preserve on what is known as the old Sperry Ranch which lies on Beartooth Creek at the foot of Beartooth Mountain. Elk for this operation would come from his elk farm in Georgia. He also proposed to raise mule and white-tailed deer which he stated he would purchase from other game farm operations within the state of Montana.

The proposal as initially proposed was for a complex of enclosures in which his game farming operation would take place. His plan called for a 240 acre pasture, a 60-acre feeding enclosure, a 20 acre quarantine area and a small holding pen. (Appendix B.) His proposal called for eight-foot tinsel lock-type wire fences with wood, steel and reinforced concrete posts.

Following an initial denial of the license and then reversal of that decision through administrative process, the licensing process for the Sleeping Giant Elk Ranch was reinitiated on August 5, 1994. The timelines stipulated by statute required public notice and a decision on the application 65 days later (October 11, 1994.) On September 12, 1994, the project team drafting the EA document made a site visit with the applicant, his ranch manager and attorney. During that visit, the applicant made the following additions/revisions to the original proposal:

*Fencing for the facility would be placed on a 12-14' roadway around the entire perimeter of the facility to reduce fence damage as well as provide a means of maintaining the structure;

*Creek bottoms would be fenced to keep animals away from the riparian zone; soil berms would be utilized in various areas to reduce runoff into the creek;

*1 to 3 fish ponds which would be within the feeding area fence; runoff protection would be provided by soil berms;

*Siting of the holding facility would be away from the quarantine area;

*A reduction in the pasture enclosure from 240 to 200 acres so as to follow the natural contour of the topography;

*The stocking rate would be between 25-50 elk, with a maximum potential stocking rate of 100;

*Although the original proposal was made to include the keeping of mule and white-tailed deer, the applicant did not anticipate having deer in the near future but made the application to get a full spectrum of game farm options included in the application. Application for a shooting preserve had also previous been made. Montana law no longer requires a license for this activity on a licensed game farm.

*The applicant stated that he did not plan to expand his game farm beyond the current proposal.

A copy of the game farm license application currently in use was sent to the applicant on August 30, 1994 for completion to aid in the evaluation. This was returned September 22, 1994 (Appendix C). This information would have been used in the EA but was received too late to be fully considered. The licensing process has been based on information from the original 1993 application, the site visit and a revised map of the facility provided by the applicant following the site visit. The revised documents are noted in Appendix B. A revised plan for the quarantine facility was sent to the Department of Livestock by the applicant in late August. Department of Livestock,in turn, provided FWP with a copy of the revised plan on September 21, 1994.

The Montana Department of Fish, Wildlife, and Parks under 87-4-408, MCA, has primary jurisdiction over the licensing of game farms (Appendix A). Section 87-4-409(3) specifies that Fish, Wildlife, and Parks has 120 days to notify the applicant of its decision to approve or deny the application. The department is also required, under the Montana Environmental Policy Act, to initiate an environmental review process for any State action that may have any significant impact on the human environment as a result of the proposed action. Since FWP is the licensing authority for game farms and such entities have potential impacts upon the environment, FWP must therefore comply with the Montana Environmental Policy Act (MEPA) in the licensing process, as well as the Game Farm Statutes. The purpose of this environmental assessment is to determine the necessity of an Environmental Impact Statement.

8. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

Agency Name:	Permit	Status
Montana Dept. of Livestock:	Quarantine Area Approval	Not yet approved
Montana Dept. of Livestock:	Animal Health Certification	No animals on site

(b) Funding: N/A

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Agency Name	Type of Responsibility
*Montana Department of Livestock:	Authority over game farm animals and animal health.
*Department of Health and Environmental Sciences:	Air, water quality, human disease.
*Water Quality Bureau:	Issues related to water quality.
*Environmental Quality Council:	Montana Environmental Policy Act compliance
*Montana Department of Natural Resources:	Conservation Districts, water rights.
*Lewis & Clark County Weed Board:	Control of noxious weeds in L & C County.
*State Historic Preservation Office:	Identifying, documenting and preserving cultural resources in Montana.
*U.S. Fish & Wildlife Service:	Threatened & endangered specie

Digitized by the Internet Archive
in 2016

https://archive.org/details/draftenvironmen1994mont_3

9. List of Agencies Consulted During Preparation of this document:

Montana Department of Fish, Wildlife, & Parks
Wildlife Division, Regions 3,4.
Law Enforcement Division, Helena Headquarters, Regions 3,4
Fisheries Division, Region 4
Legal Unit
Design & Construction Bureau
Environmental Quality Council
Lewis and Clark County Health Department
Lewis and Clark County Planning Commission
Lewis and Clark Conservation District
Lewis and Clark County Weed Control District
Montana Historical Society/State Historic Preservation Office
Montana Department of Health and Environmental Sciences
Water Quality Bureau
Air Quality Bureau
Epidemiology Section
Montana Department of State Lands (DSL),Central Land Office
Montana Department of Natural Resources & Conservation
Montana State Library/NRIS
U.S. Army Corps of Engineers
U.S. Bureau of Land Management (BLM), Headwaters Area
U.S. Fish and Wildlife Service
USDA Forest Service, Helena National Forest
U.S. Soil Conservation Service (ASCS)

PART II. ENVIRONMENTAL REVIEW

1. LAND RESOURCES

Will the proposed action result in:

a. Soil instability or changes in geologic substructure?

Proposed Action: Potentially significant impact. The facility consists of a series of fenced compounds comprising feeding, quarantine, holding areas, as well as a 200 acre pasture. Depending on the stocking rate there is potential for ground compaction and vegetative destruction, leading to topsoil loss and erosion. Concentrated grazing on slopes and use by animals in confined areas could cause erosion by both wind, water and ground disturbance from concentrated animal use which will ultimately remove topsoil. This could also lead to instability of fence posts and supports in the enclosures and contribute to fence failure.

The project also involves constructing a road/maintenance trail along the perimeter of all fence lines. Many of these roads will be cut into steep slopes that have high erosion potential and may lead to fence instability.

Alternative Action: Monitor and address of animal utilization impacts in all enclosed areas of the proposed facility. Grazing management is not an option in the pasture area as there will be year-long use of the area by animals. The use of various control techniques such as water bars and channeling systems may be able to control sheet or channel erosion problems in this large enclosure. In the feeding and quarantine areas, erosion would most likely be more pronounced because of the small size of the areas and the intensity of use. Various techniques to control run-off without creating new erosion paths could be used to reduce soil instability problems. It is unlikely that all soil instability in the feeding and quarantine areas can be eliminated.

No Action Alternative: No impact.

b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?

Proposed Action: Potentially significant impact. The facility consists of a group of fenced-in enclosures. The potential for ground compaction and vegetation destruction, leading to topsoil loss and erosion is high depending on the stocking rate. Compaction will occur especially along the interior fence lines and areas of concentrated use. There are potentially 8 different types of soils at the proposed game farm site (Appendix D.) All are loam soils and all but one have severe to very severe erosion properties. If the ground cover is reduced or totally denuded, the erosional properties would increase in combination with slopes in the area. Average slope is 25%. Road construction activities associated with fence lines may be a serious source for erosion.

Alternative action: Erosion and runoff control techniques may be able to reduce impacts in larger enclosure (pasture.) Smaller enclosures would require more intense monitoring and soil damage mitigation techniques. Because the proposal has the potential for significant surface disruption which could lead to numerous soils problems, there is a need for the applicant to draft an overall erosion control plan which would also include a regular maintenance schedule for all control aspects.

No Action Alternative: No impact.

c. **Destruction, covering or modification of any unique geologic or physical features?**

Proposed Action: No impact. Although the proposed site is at the foot of a distinctive and unique geological structure (Beartooth Mountain which is a part of the Sleeping Giant) the siting of the facility would not directly destroy, cover or modify this feature. The applicant had already begun modification of a wetland by building a complex of ponds in an area that the would be enclosed within the facility. The ponds were not noted or included in the application materials submitted to the department as part of this proposal. According to the U.S. Army Corps of Engineers office in Helena, the applicant has not applied for or received a 404 permit for pond construction.

No Action Alternative: No impact.

d. **Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?**

Proposed Action: Potentially significant impacts. The applicant proposes to enclose three areas and stock them with between 25 and 50 elk, at no time to exceed a maximum of 100. It is likely that all three areas will become denuded of vegetation to varying degrees and thus increase runoff into Beartooth Creek. Beartooth Creek, although an intermittent flowing stream when it meets the Hilger Valley, runs year-round through the site. Downstream landowners have expressed concern over the possibility of increased flows into the creek which may increase siltation, deposition or erosion along the stream. In the spring of 1994, a culvert draining one of the impoundment ponds built by the applicant became clogged. When the obstruction was removed, it released a flow into Beartooth Creek which moved rapidly down Beartooth Creek with water finally emptying out into a hayfield on the Carrie-Hilger Ranch. The ponds have since been expanded and modified.

Alternative action:: As previously discussed, the applicant would have to monitor and address erosion problems resulting from utilization of land within and outside the enclosures. Storm water retention basins and gravel/membranes to filter storm water may also be utilized. A vegetative buffer between the site and the riparian area could not guarantee a reduction of runoff and sediment deposit in the creek. The applicant has changed the type of pond on the property from an impoundment to excavated ponds. A formal plan to address such situations which includes regular monitoring and maintenance of the ponds and drain system would be important to avert situations which would cause sudden volume surges which cause stream erosion, deposition or siltation.

No Action Alternative: No impact.

2. AIR

Will the proposed action result in:

a. Emission of air pollutants or deterioration of ambient air quality?

Proposed Action: Minor impacts. The proposed location is in a rural area believed to be in compliance with all federal and state air quality regulations. Emissions from a game farm would be similar to those of a cattle operation which was the former use of the site (DHES communication, 9/13/94.)

No Action Alternative: No impact.

b. Creation of objectionable odors?

Proposed Action: Minor impacts. Odors are contingent upon the numbers of animals kept in confinement and the size of the confined area. Variables such as weather and wind conditions will influence odors. Odors would be a problem only those working or residing on the game farm property as the nearest neighbor, Carrie-Hilger Ranch, is approximately 3/4 of a mile away and upwind. Mitigation measures would include regular removal of fecal materials and timely clean-up of remnants from other game farm related activities. (slaughtering, calving, etc).

No Action Alternative: No impact.

3. WATER

Will the proposed action result in:

a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, turbidity or pathogens?

Proposed Action: Potentially significant impacts. Feeding and quarantine areas are planned to include portions of Beartooth Creek and the ponds which have been constructed in a wetland area. Depending on stocking rate, time of year, storm events and operational activities, there is a high potential for discharge into the creek. Runoff from over-utilized areas, particularly on steep slopes, along with pathogens which may be present in quarantine or feeding areas could be expected to flow toward the creek. The proposed quarantine area is located on a slope which would exacerbate runoff problems.

Alternative action: Potentially significant impacts. The applicant has proposed to berm areas along the creek and the ponds to reduce and control runoff. The nature of the soils available for berming in this area generally rate moderate in permeability and may limit the effectiveness of this technique. Furthermore, berms are considered only temporary methods of confining and isolating flows and should not be relied upon as long term control for water quality problems (MDFWP Design and Construction Bureau, personal communication

9/20/94.) Soil berming an area may only briefly postpone the percolation of flows through the berm and into streams or water bodies.

The removal of the feeding and quarantine enclosures from the riparian and wetland areas could reduce the potential impacts on surface water quality. Quarantine facilities should be located at least 100 feet from any surface water. Mitigation in the pasture area would require the use of annual revegetation in areas of high utilization as well as various forms of runoff control to keep runoff from directly entering surface water. The collection, bagging, and transportation fecal material and waste products to a county approved disposal site would help to reduce the possibility of water-born pathogens entering Beartooth Creek.

No Action Alternative: No impact.

b. **Changes in drainage patterns or the rate and amount of surface runoff?**

Proposed Action: Potentially significant impacts. Alterations of land condition by concentrating animals in relatively small areas would result in changes in drainage patterns and increase surface run-off. The proposed site includes areas of significant slope (as much as 45%) particularly in the pasture and quarantine areas. Soils found in these areas rate rapid in run-off and severe to very severe in erodability. Loss of vegetation by intensive grazing and roading would increase runoff.

Alternative action: Potentially significant impacts. Mitigation would be very difficult in areas of constant, intense animal utilization such as the quarantine and feeding areas. The applicant has proposed berming areas adjacent to the creek and ponds. As previously mentioned, soil berming in and of itself is not a reliable long-term technique for runoff control. Design and construction of diversions to handle runoff would be necessary to re-direct runoff back into traditional routes. The 200 acre pasture would require monitoring, revegetation and runoff control in areas of high utilization.

No Action Alternative: No impact.

c. **Alteration of the course or magnitude of flood water or other flows?**

Proposed Action: Potentially significant impacts. Flows in this area are dependent upon snow levels and spring precipitation although according to the applicant and neighbors, Beartooth Creek runs through the property year-round. Unusually heavy amounts of snow or rain coupled with changes in topography and vegetative cover caused by the proposed facility, could result in alteration of flows and magnitude. As previously mentioned, drainage problems with one of the ponds when it was an impoundment resulted in a surge flow downstream last spring. Any kind failure or overflow of the current ponds along with heavy rains or thaws which are moving off of non-vegetated slopes could increase the possibility of a flood situation.

Alternative action: Potentially significant impacts. Constant monitoring of ponds during times of heavy run-off and precipitation and appropriate action in the event of problems could forestall occurrences which lead to increases in water rate. Use of proven erosion/runoff control methods of in and around enclosures and on roads around fence perimeter control or reduce runoff but this could not be guaranteed.

No Action Alternative: No impact.

d. Changes in the amount of surface water in any water body or creation of a new water body?

Proposed Action: Potentially significant impacts. As mentioned previously, increased run-off from barren areas within enclosures could increase flows into Beartooth Creek.

Alternative action: Potentially significant impacts. Monitoring of ponds during times of heavy precipitation or thaw and appropriate action. Erosion/runoff control in intensely-grazed enclosures to reduce or control runoff. These actions may or may not control the amount of surface water.

No Action Alternative: No impact.

e. Exposure of people or property to water related hazards such as flooding?

Proposed Action: Potentially significant impacts. Increased run-off from over-grazed slopes in enclosure areas could contribute to increased flow into Beartooth Creek. Should this be compounded with a rainstorm of major proportion or thaw, it could pose a potential hazard to downstream residents, buildings and property.

Alternative action: Potentially significant impact. Utilization of proven runoff and erosion control, monitoring of the pond levels and appropriate action in the event of increased water flow risk.

No Action Alternative: No impact.

f. Changes in the quality of groundwater?

Proposed Action: Unknown impacts. Insufficient data was available at the time of this writing to adequately assess this impact.

No Action Alternative: No impact.

g. Changes in the quantity of groundwater?

Proposed Action: Unknown. Generally speaking, unless extreme changes are made on the surface or slope area, it is unlikely that quantity would be affected by this operation. Insufficient data was available at the time of this writing to adequately assess this impact.

No Action Alternative: No impact.

h. Increase in the risk of contamination of surface or groundwater?

Proposed Action: Potentially significant impacts. Surface water could be contaminated by farm animal feces on the site if improper or unreliable runoff controls or site sanitation methods are utilized. Pathogens which

may be present in feeding and quarantine areas could also be absorbed into the soil, thus potentially affecting alluvial groundwater.

Alternative action: Potentially significant impact. Move quarantine and feeding areas a minimum of 100 feet from away from surface water bodies. Utilization of reliable water runoff control techniques. Effects on terrain from concentrated animal use, coupled with the topography of the watershed could limit the ability of these methods to mitigate this risk.

No Action Alternative: No impact.

i. Violation of the Montana Non-Degradation Statute?

Proposed Action: Potentially significant impacts. Because of the intense utilization of stock in a confined area, this facility may be considered an animal confinement facility. Operators of such facilities are required to retain wastes and by-products on their property. Beartooth Creek is an intermittent drainage and therefore considered a state waterway. The applicant must meet the non-degradation statutes, Section 75-5-303 and may need to acquire a Concentrated Animal Feeding Operation permit from DHES (pers. com.,Tim Byron, DHES.)

Alternative Action: Potentially significant impact. Regular collection of fecal material and disposal at appropriate site not utilized by wildlife or livestock. Reliable physical barriers which confine fecal material to property and out of run-off channels would be necessary. The applicant will need to operate under best management practices, contain non-point pollution on the facility and protect beneficial use through compliance with DHES requirements and permits. The location of an animal confinement facility anywhere close to the reaches of upper Beartooth Creek poses potential water quality risks.

No Action Alternative: No impact.

j. Effects on any existing water right or reservation?

Proposed Action: Unknown impacts. The area is within a surface water rule closure area known as the Towhead Gulch Basin Closure. The applicant cannot receive a permit for a consumptive use of surface water. If the applicant purchased water rights along with the property, some or all of those water rights may need to be changed, i.e.: from irrigation to commercial or recreation (Jim Bond, DNRC.) The senior water rights for Beartooth Creek drainage are held by the Carrie-Hilger Ranch. Water rights in the area have been and continue to be an on-going point of contention. The applicant can develop a spring or drill a well to obtain groundwater. The applicant has not indicated his intentions for water use on the proposed facility.

No Action Alternative: No impact.

k. Effects on other water users as a result of any alteration in surface or groundwater quality?

Proposed Action: Potentially significant impacts. The Carrie-Hilger Ranch utilizes Beartooth Creek as a source of stock and irrigation water. Concerns have been raised by neighbors about the possibility of surface water

carrying water-borne pathogens from the facility site downstream and affecting livestock and groundwater sources downstream.

Alternative action: Potentially significant impact. Removal of fecal and other facility by-products that could pose animal or human health risks to an approved disposal site and utilization of reliable water runoff control techniques could reduce this impact. Regular testing of water quality could be used to gauge effectiveness of control measures.

No Action Alternative: No impact.

l. Effects on other users as a result of any alteration in surface or groundwater quantity?

Proposed Action: Potentially significant impacts. Should the applicant use water from Beartooth Creek for his game farm operation this could negatively affect downstream users who rely on flows for their livestock operation.

Alternative action: Redesigning of the ponds already initiated by the applicant. Monitoring and appropriate action could reduce the possibility of future surge flow incident. The applicant must comply with DNRC water rights, spring development and groundwater procurement procedures, rules and statutes.

No Action Alternative: No impact.

4. VEGETATION

Will the proposed action result in:

a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?

Proposed Action: Potentially significant impacts. The extent and rapidity of changes in plant diversity, productivity and abundance will be related to the number of animals pastured on the premises. The applicant initially proposed to keep 24 elk on the facility. Currently, his proposal is for between 25 and 50 elk, never to exceed 100 (and an unknown number of deer) on the facility at a time. The stocking rate, combined with facility size and year-long grazing intensity in the pasture and feeding areas will reduce vegetative productivity and abundance within the area enclosed by the perimeter fences. Facility development may also result in timber removal of up to 200 feet beyond all enclosures to reduce the potential of fence damage. In addition, a 12-14 foot maintenance trail/road will be adjacent to the enclosures and could expand the impact with the potential for weed establishment. Trees will be most noticeably affected, but natural forb and grass composition will favor invader species. If weed free hay is not used, feed could introduce weed seeds which could alter the vegetation of the area.

Alternative action: Potentially significant impacts. The proposed stocking rates even at their lowest level, would have significant impacts on the facility vegetation. Quarantine, feeding and holding areas would maintain little

if any vegetative cover. The pasture area would not suffer the impact as quickly but would, over time, also be significantly changed. It may not be possible to mitigate this impact due to the animal concentration nature of this operation.

No Action Alternative: No impact.

b. **Alteration of a plant community?**

Proposed Action: Potentially significant impacts. The degree of alteration of the existing plant community is dependent on stocking rates (assumed to reach at least 25 elk and an unknown number of deer) and grazing practices which are assumed to be yearlong. Under these conditions, perennial plants -including grasses - would be expected to decline and annual forbs, including noxious weeds, would be expected to increase.

Alternative action: Potentially significant impacts. It is questionable if any mitigating alternatives exist because the proposed facility will be intensely grazed yearlong.

No Action Alternative: No impact.

c. **Adverse effects on any unique, rare, threatened, or endangered plant species?**

Proposed Action: Unknown. In the absence of a site-specific species inventory, it is not possible to assess this impact. However, the Natural Heritage program of the Montana State Library indicates that the following *Species and Habitats of Special Concern* occur within a ten-mile radius of the proposed site. These are ranked at a state level as "very rare" and "local throughout their range." It is possible that these sensitive species occur on or near the proposed facility although described occurrences were not located on the proposed site:

*RABBIT-FOOT CRAZYWEED (OXYTROPIS LAGOPUS VAR CONJUGENS)
*DIVIDE BLADDERPOD (LESQUERELLA KLAUSII)
*AUSTIN'S KNOTWEED (POLYGONUM DOUGLASII SSP AUSINAE
*ANTELOPE-BITTER-BRUSH/ROUGH FESQUE HABITAT TYPE (PURSHIA TRIDENTATA/FESTUCA SCABRELLA HT)
*LESSER RUSHY MILKVETCH (ASTRAGALUS CONVALLARIUS VAR CONVALLARIUS)

No Action Alternative: No impact.

d. **Reduction in acreage or productivity of any agricultural land?**

Proposed Action: Potentially significant impacts. The applicant proposes to use approximately 200 acres of wooded rangeland for a pasture area which most likely will lose vegetative cover and thus, its productivity due to concentrated animal use.

Alternative action: Potentially significant impacts. The applicant will be concentrating his stock on this land year-round. Previous use for the 200-acre pasture was a portion of a larger-area wooded rangeland . Locations for

the other enclosures historically were not for concentrated agricultural use. These sites would be taken out of agricultural production in the conventional sense.

No Action Alternative: No impact.

e. Establishment or spread of noxious weeds?

Proposed Action: Potentially significant impacts. Confinement of game farm animals (to number anywhere from 25 to 100 elk and an unknown number of deer) within three enclosures totaling 280 acres, combined with yearlong grazing will result in reduced vigor of desirable perennial plants, soil compaction, declining plant cover and soil erosion within the land area confined by the compound fence. These circumstances are considered to be highly conducive to establishment of noxious weeds..

Alternative Action: Potentially significant impacts. A comprehensive noxious weed control plan needs to be designed and followed for the entire property. Current weed control plans for the ranch are not on file at the Lewis and Clark County Weed office (pers. com., Larry Hoffman. L & C County) and the Lewis and Clark Conservation District has no weed control plan on file for a timber harvest which took place on the property in 1993-94. Weed seed free hay should be fed in the facility.

No Action Alternative: No impact.

5. FISH & WILDLIFE

A. Based on design of the proposed game farm, and physical attributes and wildlife values of the site, what is the potential for any of the following to occur?

a. Through-the-fence contact between game farm animals and wildlife (consider traditional seasonal habitat use and location of travel routes and migration corridors).

Proposed Action Potentially significant impacts. Conventional game farm fencing consists of a woven-wire fence 8 feet in height. The applicant proposes to use eight foot tinsel lock wire fences .Either fencing style will not prevent contact between penned animals and native wildlife at this site. The proposed game farm site is used yearlong by mule deer and pronghorn antelope, and intermittently by elk, black bear and mountain lion. It is winter range for mule deer, and is on the edge of a pioneering bighorn sheep herd. Both mountain goats and bighorn sheep are visible from the property on the slopes of the Sleeping Giant (Beartooth Mountain).

Contact via nose-to-nose, nose-to-other body parts, and nose-to-soil and vegetation along the fence line, are all known methods of disease and parasite transmission (See 5B.a. - transmission of diseases or parasites). Contact would be most significant and possibly most intense during breeding and calving season.

Alternative Action: Potentially significant impacts. On level ground, double fencing, 12 feet high and at least 10 feet apart may reduce nose-to-nose contact. In addition, a top rail on one or both of the fences may deter jumping of the fence (F. King, MDFWP Wildlife Management Area Manager, pers. com.) On the proposed

site, construction of the double fence would involve environmental impacts associated with fence construction due to steep timbered slopes and wet valley bottoms as well as stability concerns of the fence in these areas.

No Action Alternative: No impact.

b. Escape of game farm animals - consider site-specific factors that could reduce effectiveness of perimeter fences built to standards outlined in Rule 12.6.1503A (including steepness of terrain, winter snow depth/drifting, susceptibility of fences to flood damage, etc).

Proposed Action Potentially significant impacts. The western boundary of the proposed fence runs perpendicular to terrain having a 25% (4:1) slope. Elk are capable of jumping fences that exceed 7 feet in height (Zackheim et al., 1994). When under stress, elk can cross or penetrate any fence, and deer are more difficult to contain than elk (Youmans 1992). The minimum 8 foot fencing specification was established for situations on level terrain. Fencing to discourage elk from attempting to jump a fence, the height of which is effectively reduced due to steep terrain, are unknown. Portions of the immediate adjacent sidehill appear to have slopes of over 45% (USGS 1:24,000 topographic quadrangle map).

Snow loading, floods, wildfire, earthquake hazards, fallen trees, soil slumps are all natural circumstances that can result in breaches of game farm fences, most of which have been documented as causes of fence failures on game farms (Zackheim). The proposed site is located near the head of Beartooth Creek.

Snow accumulations, together with strong chinook winds that are common along the east slope of the Continental Divide, are known to create drifting conditions adequate to facilitate passage of game farm animals over fences. In addition, escape of animals has occurred with regularity as a result of inadequate fencing, poor fence maintenance, damage to fences from confined animals or wild animals, vehicle accidents, and gates left open (MDFWP, 1992).

Wooden fence posts are susceptible to wildfire. The site has a history of repeat fire occurrence, so the possibility of escapement exists if fence support structures are damaged. Whether the game farm animals would survive a fire incident severe enough to damage the fence, and thus escape, is unknown.

The proposed game farm site occurs in earthquake zone 3 which means, "a major earthquake may occur at any time". Only Yellowstone Park and the San Andreas fault have a higher rating (Paul Spengler, Lewis and Clark County Disaster and Emergency Services Coordinator, pers. comm.). Wire fences usually withstand the shock of a quake. Buildings, retaining walls, and pond structures would be highly susceptible to damage.

Significant soil failure could result on the proposed site. Topography of the game farm site consists of a north facing sidehill on a moderate to severe slope, and the opposing south slope is the actual foot of Beartooth Mountain which rises abruptly 2,200 feet above the game farm. The 200 acre Pen #4 located on the south side of Beartooth Creek, has a deep gully on its north face and significant amounts of timber.

The precise soil composition of each pen is unknown. In Soil Survey of the Helena Valley, Part of Lewis and Clark County Montana (USDA SCS, ca 1980) indicates that mass soil failure or slumping is more likely to occur on a severe slope. A "severe slope" is categorized in the 20 to 40% range. The proposed fences on all aspects

would occur on slopes varying from slight to over 30%. The stability of slopes both with and without the stress of earthquake potential is not known and should be addressed prior to establishment of the proposed game farm fence to prevent the possibility of fence failure and thus animal escapement.

Alternative Action: Potentially significant impact. Double fencing would be susceptible to the same natural catastrophes as a single fence.

No Action Alternative: No impact.

c. Ingress of wildlife - consider site-specific factors that could reduce effectiveness of perimeter fences (see b.) built to standards outlined in Rule 12.6.1503A, as well as circumstances that could attract wildlife to or into the game farm (traditional seasonal habitat use and location of travel routes and migration corridors).

Proposed Action Potentially significant impact. The presence of mountain lions within the area of the game farm is a near certainty. A lion among penned animals is likely to create chaos among the animals with the potential to damage or destroy fences. Lions among penned cattle in the area have resulted in the cattle tearing down fences and scattering into the surrounding country. Only well-maintained, extensive, multiple electric fence would likely be able to deter a lion from crossing game farm fences.

Wild elk will most likely attempt to gain entry to the game farm. There are numerous instances of wild animals being accidentally or intentionally lured into game farms and ending up on the inside of enclosures. This occurs when gates are left open, fence maintenance is poor, or because the wild elk are determined to get inside the enclosure and jump or climb over the fence. The motivation to make contact with estrous females is powerful and bull elk on either side of the fence will attempt to satisfy this urge. The proposed game farm site is within the yearlong habitat of 250 native elk (in the east portion of hunting district 839). A concentrated group of estrous females could attract bull elk for miles. Wild animals will be aware of the game farm animals, and vice versa.

In other states, a large percentage of captive elk came from the wild. In Colorado, 40% of game farm facilities have had wildlife ingress especially during the rut and during winter when food is scarce (Proceedings of Game Farm Workshop, 1992.)

Alternative Action Potentially significant impact. The effectiveness of double fencing, and the necessary 12-foot minimum height of fences on severe slopes has not been tested. It is logically assumed that the potential for ingress of wild elk will be reduced with high, double fences.

No Action Alternative: No impact.

d. Deterioration of critical wildlife habitat (capability to produce or sustain wildlife populations).

Proposed Action Potentially significant impact. Approximately 300 acres (not including possible secondary exterior fences and perimeter road) of important antelope spring, summer and fall range and year-round mule deer range will be eliminated. resulting in displacement and thus increased use of remaining habitat.

Although this proposal would directly impact approximately 300 acres, it would contribute to the cumulative effect of other land use changes.

Alternative Action Potentially significant impact. More wildlife habitat would be removed from availability through the use of double fence.

No Action Alternative: No impact.

e. Displacement of wildlife from critical habitat(s) as a result of proposed fences or other factors.

Proposed Action Potentially significant impact. Mule deer and antelope will be displaced from habitat used yearlong. The Beartooth Creek-Ming Bar travel corridor (Map 2) would be affected. Potential for whitetail and moose (Map 3) as well as other wildlife movement along Beartooth Creek will be compromised.

Alternative Action Potentially significant impact. The utilization of a double-fencing technique would affect a greater amount of total acreage and further displace wildlife movement and utilization of the area.

No Action Alternative: No impact.

f. Creation of barriers to travel routes or seasonal migration corridors used by wildlife populations.

Proposed Action Potentially significant impact. As discussed elsewhere, there is an important travel corridor between the Beartooth Wildlife Management Area from Ming Bar to the base of the head of the Sleeping Giant (Beartooth Mountain). From the west edge of the river, wildlife move west through a low pass near the head of Beartooth Creek. The proposed game farm is located along this travel route. Beartooth Creek is a narrow, tucked-away drainage that has provided protected passage for wildlife moving from the river westward toward the Continental Divide, Little Prickly Pear Creek, or the Hilger Valley. The proposed game farm would be sited across Beartooth Creek. Unless wildlife were to go over Beartooth Mountain (the Sleeping Giant), there would be reduced opportunity to get around the game farm on the north or west.

The proposed game farm site is within one mile of yearlong mountain goat and bighorn sheep concentration areas on the northeast, north and west, attesting to the type of terrain. Moose, whitetails, antelope, and elk access the Missouri River along the south edge of the Sleeping Giant (Beartooth Mountain) using the Beartooth Creek drainage. This location is a likely corridor for wildlife to cross the river since it is a gentle low pass from the head of Beartooth Creek to the river's edge, less than a mile distant. North and south of this crossing, the river channels through steep cliff canyons making river crossings more difficult. The terrain naturally channels wildlife movements from the Beartooth Wildlife Management Area from the low sloping grassland of Ming Bar, across the river and into Beartooth Creek.

Alternative Action Potentially significant impact. A double fence would involve more acreage and create a greater barrier to wildlife travel and movement.

No Action Alternative: No impact.

g. Other conditions that may stress wildlife populations, affecting their diversity, abundance or distribution.

Proposed Action Potentially significant impacts. Artificial concentrations of wildlife often result in animal health problems. A net decline in habitat capacity will occur if the game farm is constructed resulting in increased habitat competition. If hybrid game farm animals are accidentally brought onto the facility, escapement could result in the numerous problems associated with the introduction of non-native species or hybrids.

As the newly introduced bighorn sheep herd continues to move about, they may come encounter the proposed game farm. Bighorn sheep are highly susceptible to disease and subsequent die-offs.

No Action Alternative: No impact.

h. Changes in the diversity, abundance or distribution of game populations including redistribution of wildlife from habitats that would be rendered unsuitable or inaccessible because of fencing or other factors.

Proposed Action Potentially significant impacts. About 300 acres would be converted into the game farm site. Diversity of wildlife would be affected if hybrid game farm animals were inadvertently brought onto the game farm then escape. Abundance of wildlife could be affected particularly if adjacent landowners are not willing to tolerate increased numbers due to displacement. Landowners in the area are currently suffering game depredation problems. Distribution of wildlife would most likely remain similar, except for precluded use of seasonal habitat which would be used for the proposed facility.

Alternative Action Potentially significant impacts. Wildlife considerations would remain the same except slightly more habitat would be removed from wildlife use with the use of double fencing.

No Action Alternative: No impact.

i. Changes in the diversity, abundance or distribution of nongame populations (include redistribution of wildlife from habitats that would be rendered unsuitable or inaccessible because of fencing or other factors).

Proposed Action Potentially significant impacts. As described in section 5.B.a. (disease), a wide variety of small mammals (and possibly birds) are known to be vectors for disease transmission including badgers, ferrets, possums, rats and fox (Beatson 1985, Little et al. 1982, James Innes, game farm operator, pers. com). A disease outbreak on the proposed facility could significantly affect diversity and abundance of wildlife in the area.

The consequences of transmission of diseases from game farm animals to scavenging birds is unknown, however birds are believed capable of contracting certain diseases from mammals, including tuberculosis.

Many species of non-game mammals and birds scavenge carcasses. If remains of game farm animals are not properly disposed of the risk of disease transmission to a variety of other species is possible. Pathogens may be transmitted by other means a to native mammals and birds.

Alternative Action Potentially significant impacts. Alternative fencing methods will not prevent ingress or egress of nongame wildlife populations.

No Action Alternative: No impact.

j. Adverse effects on any unique, rare, threatened or endangered species or their habitats.

Proposed Action: Potentially significant impacts.. The Sleeping Giant area is utilized at least occasionally by the following unique, rare, threatened or endangered species:

MAMMALS - gray wolf (Endangered), grizzly bear (Threatened), wolverine (Sensitive), lynx (Sensitive)

BIRDS - bald eagle (Endangered), northern goshawk (Sensitive), ferruginous hawk (Sensitive), peregrine falcon (Endangered), sharp-tailed grouse (Sensitive), long-billed curlew, flammulated owl (Sensitive), boreal owl (Sensitive), black-backed woodpecker (Sensitive)

FISH - westslope cutthroat trout (Sensitive)

AMPHIBIANS - spotted frog (Sensitive)

The Sleeping Giant area provides habitat for the following "sensitive" species that are not known to be currently present:

MAMMALS - Northern bog lemming (Sensitive)

BIRDS - harlequin duck (Sensitive), loggerhead shrike (Sensitive)

Contact with game farm animals or effluent that may be diseased could impact these species. Only those that are known to scavenge would be the primary species which would be impacted. Water or soil which contains pathogens could have consequences for other species.

Alternative Action: Potentially significant impacts. Change in fence design or runoff controls would not mitigate concerns for risks to these species.

No Action Alternative: No impact.

k. Introduction of any species not presently or historically occurring in the affected area.

Proposed Action Potentially significant impact. Introduction of exotic and hybrid wildlife to the wild has occurred on numerous documented occasions (MDFWP, 1992; Kahn, 1992; Youmans,1992). It is difficult to visually detect a red deer/elk hybrid from a pure Rocky Mountain elk. Definitive analysis is done through DNA testing. However this technique is only accurate when used on first-generation offspring. Many game farmers prefer red deer/elk hybrid animals to those of pure strain wild elk because they are easier to handle, they conform to captivity somewhat better than elk, and they are aggressive breeders (Williams, 1992). The serious consequences of exotic and hybrid animals being liberated into the wild, resulted in emergency action by the Montana Fish, Wildlife & Parks Commission instituting emergency rules during 1992 to prevent the transport of certain animals into the State of Montana, and in 1993 importation of red deer and other exotics to Montana

were banned. Nevertheless, the possibility exists of red deer/elk hybrids finding their way to Sleeping Giant area via the proposed game farm.

In addition to the possibility of hybrid and non-native game farm animals becoming introduced, it is quite possible that new non-endemic species of pathogens and parasites could be released into the wild via game farm stock. For this reason, certain species of exotic and at least 2 species of endemic wildlife are now banned from being imported into Montana. In the case of the latter, white-tailed deer and moose cannot legally be imported if their source of origin is east of the 100th meridian, which roughly parallels the Mississippi River and is thus on the east edge of the Great Plains and the natural barrier to species of parasites which are not endemic to the western states. This concern prompted Alberta, British Columbia and Manitoba to place an import moratorium on all cervids (Kahn, 1991).
The applicant has proposed to bring elk from Georgia where he currently operates a game farm. In Georgia elk and red deer facilities under the authority of the state veterinarian, although other wildlife-keeping facilities are regulated by the state wildlife agency. Considering the location of the proposed source, the potential for importation of non-endemic diseases and pathogens could be considered significant.

Alternative Action Potentially significant impact. Double fencing in excess of 8 feet in height may reduce the possibility of contact between game farm animals and native wildlife, but elimination of all contact cannot be guaranteed. If manure and waste feed is properly treated or disposed of, transmittal of pathogens and parasites through this pathway would be reduced, but special provisions to accommodate the fish ponds in Pen #3 would have to be undertaken to prevent wash outs, super-saturation of surrounding soil and thus slumps, overfilling and thus run-off or mass soil failures as a result of unusual precipitation. Feeding and watering areas must also be protected from pathogens.

No Action Alternative: No impact.

B. What degree of impact would any of the following (a-f) have on wildlife populations associated with the site? For items (a.-f.) that would result in impacts, provide a narrative that describes potential consequences.

a. Introduction and/or transmission of diseases or parasites to wildlife populations associated with the site.

Proposed Action: Potentially significant impacts. Inadvertent, introductions of parasites and diseases of major significance have taken place at other sites in Montana and in other states (Appendix E) and provinces (Geist, 1991). Tuberculosis has been documented on 6 Montana game farms. Transmission of Tuberculosis to free-ranging wildlife populations would have a significant impact to both wildlife and humans. Efforts to control it, to protect wildlife resources as well as the state's livestock industry, would be very expensive and very difficult.

If disease or parasite problems were to occur at the site of the proposed site, the potential for dispersal of pathogens and parasites throughout central Montana would be high as demonstrated by known dispersing animals (Map 6) and natural overlapping home ranges (Map 5). The spread of pathogens and parasites could quickly occur due to interaction among adjacent big game herds. Animal behaior characteristics including socialization, breeding habits and birthing patterns will influence the propensity for dispersal of disease.

Adequate design of the quarantine facility is essential for disease control.

A wide variety of small mammals (and possibly birds) are known to be vectors for disease transmission including badgers, ferrets, possums, rats and fox (Beatson 1985, Little et al. 1982, James Innes, game farm operator, pers. com.). The consequences of transmission of diseases that are known to occur within game farm animals to scavenging birds is unknown, however birds are known to be capable of contracting certain diseases from mammals.

The game farm application indicates that deer may be included as part of the facility's stock. The original source of these animals is of significant concern. White-tail deer and moose, depending upon their origination site, pose a serious threat to all big game ungulate species in Montana through transmission of non-endemic parasites. The likelihood of inadvertently introducing parasites such as Paralaphostrongylus tenuis and Elaphostrongylus cervi, prompted Alberta to close its borders to import of all ungulates in 1988, and British Columbia followed suit in 1991 (MDFWP, 1992).

Manure, other effluent and contaminated soil from the game farm is a potential source for transmission of disease and parasites. If it is stored in such a manner that wild animals would have access to it. It could be transported below the penned area to public and/or private lands by runoff. Thus, the potential for inadvertent transmission of these hazards would be high.

Disease pathogens and parasites may remain viable in contaminated soil for varying lengths of time (up to several years in the case of Elaphostrongylus cervi) depending upon their life cycle and durability. Many parasites of concern are passed through fecal material.

Bovine tuberculosis organisms under the right conditions may survive from 3 to 6 months (Dr. Robert Meyer, Regional Epidemiologist, Western Region of Veterinary Services, APHIS, USDA, specializing in bovine tuberculosis). Suitable conditions include a moist cool (or freezing) climate, out of direct sunlight. The Tb organism survives better than most pathogens due to its waxy lipid cell wall which protects it from drying. Moist, cooled fecal material, out of direct sunlight, could provide the correct environment for tuberculosis to remain viable.

Although brucellosis is less durable than tuberculosis, Dr. Calvin Campbell (Regional Epidemiologist, Wester Region of Veterinary Services, APHIS, USDA, specializing in brucellosis), the organism can remain viable for days or weeks if cool moist conditions exist. If an animal is infected, some pathogenic discharge will occur via saliva and nasal discharge or through body waste, however,infective dosages do not exist. Fluids associated with the birthing process are the source of brucellosis transmission. A means of preventing the immediate or latent spread of this disease is to immediately pick up, bag and adequately dispose of aborted fetuses, placentas, and other afterbirth since nose contact with these materials is the method of transmission. Isolation of female animals in an area by themselves where they may calve and clean the newborn further aids in stemming contamination and transmission of brucellosis.

Leptospirosis is a widespread infectious disease that is transmissible from animal to animal to humans. The bacteria may survive for weeks in stagnant ponds, moist and slightly alkaline soils, with slow-moving slightly alkaline streams. Direct contact with infected urine or urine-contaminated environment is the typical pathway

of exposure. The disease has been reported in livestock, white-tailed deer, antelope and red deer. Leptospirosis has been reported in elk in Washington state and has caused death in red deer.

Alternative Action: Potentially significant impacts. Although double fencing may reduce the likelihood of contact between animals, contaminated soil and manure piles remain a source of potential transmittal. Employing methods to prevent manure from being a source of pathogens and parasites to wildlife could reduce potential. The location of 3 fish ponds within Pen #3 significantly increases this potential and complicates containment of effluent. Quarantine facilities must be located at least 100 feet from surface water.

There is some possibility of game farm animals escaping during transport between destinations. If a vehicle transporting game farm animals were involved in an accident, the possibility exists for diseased animals to escape.

No Action Alternative: No impact.

b. Establishment of feral populations of escaped game farm animals.

Proposed Action Potentially significant impacts. Kahn (1992) cites four instances in Colorado where game farm animals became established in the wild. He reports:

> "Among those cases documented in Colorado, the success of efforts to recapture escaped wild ungulates has varied widely -- from all to none. Some escaped elk, red deer or elk/red deer hybrids have been recovered (dead or alive) by owners in 60% of the cases. However in only about 33% of the cases have all escaped animals been recovered. At least six captive elk have been shot by hunters during the past four years; these harvests have occurred up to 30 miles from the facility of origin. Recovery efforts have been even less successful for other escaped species; in 67% of the documented cases owners of escaped exotics have failed (or in some cases not even attempted) to recover animals at large. The consequences of failing to recover escaped captive animals has included establishment of free ranging populations of ibex, Barbary sheep, red deer and fallow deer, as well as the potential genetic contamination of native elk and bighorn sheep populations. The Colorado Division of Wildlife has spent in excess of $150,000 during the past four years in efforts to control and eliminate these escaped populations of exotic wildlife. In spite of these resources the efforts to date have not been 100% successful.
>
> Based on cases documented in Colorado, attempts to recapture escaped captive wildlife are usually only partially successful at best; moreover, escaped individuals can remain at large and survive in the wild for extended (or indefinite) periods of time, and can range significant distances from facilities of origin. Species, group size, acclimation to and duration of confinement, facility location and surrounding habitat type, timeliness of detecting escape, and efforts expended in recapture attempts all appear to influence the likelihood of owners recapturing escapees.
>
> The issue of escape and recapture (and ingress of native wildlife) of captive wildlife is critical to wildlife agencies concerned about the effects of captive wildlife on native wildlife. In Colorado we have demonstrated that captive wildlife can escape and can subsequently intermix with native

animals. This heightens concern for disease transmission, genetic contamination and habitat competition."

By statute all game farm animals must be identified (§ 87-4-414(3), MCA). In the event of an escape, the operator must notify FWP and recover the animal within 10 days or the animal may be destroyed.

Efforts to recapture or destroy escaped game farm animals would be extremely costly given the timbered rugged terrain of the proposed site and surroundings. Even with the best of methods and intentions, it may not be possible to recapture escaped game farm animals once they have escaped in this area.

Alternative Action: Potentially significant impacts. In some locations, high, double fencing may reduce the possibility of escapes or ingress of native wildlife. Construction and maintenance of an exterior fence may be difficult due to the pitch of the slope beyond the proposed fence location. Although a double fence would undoubtedly be effective in minimizing nose-to-nose contact between animals, it would not be immune to natural events such as timber blow-down, soil slumps, earth quakes, fire and the tenacity of some animals to cross any barrier. Under the right conditions or motivation, captive animals have been known to overcome some of the most elaborate fencing systems. The literature repeatedly reports that if animals are adequately motivated to enter, or a captive animal is adequately motivated to escape, that they overcome fences that in other circumstances have appeared adequate to prevent ingress and egress.

A contingency plan to recapture escaped animals could be a condition of licensing, however escaped game farm animals in this terrain could be extremely difficult to recapture.

There remains the possibility of game farm animals escaping during transport between destinations. If a vehicle transporting game farm animals were involved in an accident, the possibility exists for hybrid animals to escape. This type of occurrence appears to be one explanation for the suspected introduction of red deer into the elk population west of Helena (MDFWP Enforcement Division).

Genetic testing of all game farm animals to be brought to the site would reduce the potential impact of escape or ingress to native wildlife populations. Mandatory genetic testing of game farm animals by the operator would be a condition of licensing, however, testing technology is accurate for screening of first generation hybrids only. It is less accurate on succeeding generations. It cannot be relied upon totally to substantiate genetic purity.

No Action Alternative: No impact.

c. Habitat degradation or competition as a result of feral populations or exclusion of wildlife populations from traditional seasonal habitat (including migration corridors).

Proposed Action: Potentially significant impacts. The game farm site will totally remove approximately 300 acres of native wildlife habitat from use. In addition, it may draw native wildlife to the site and result in habitat degradation of the surrounding lands. The interruption of the Beartooth Creek-Ming Bar travel corridor is discussed in section 5.

Winter habitat for mule deer will be reduced. Animals would probably redistribute and concentrate on remaining habitat.

Genetic testing does not reliably identify second generation hybrid red deer/elk. So, it is expected that if feral populations become established, they could be composed of red deer/elk hybrids. The impact of competition between genetically pure and hybrid animals would not be readily distinguishable.

Alternative Action: Potentially significant impacts. Changes in fencing design may not address this concern.

No Action Alternative: No impact.

d. Hybridization/genetic pollution of wildlife populations associated with the site.

Proposed Action Potentially significant impacts. If pure or hybrid red deer were to find their way onto the Sleeping Giant game farm and then escape, breeding with native elk would be a certainty since native animals are immediately available, and because red deer and red deer hybrids reproductively out-compete elk. The pool of 16,000 elk (Map 7) in the greater Helena area could be affected relatively quickly (Kahn 1991). Serious concerns remain regarding the possible elimination of true Rocky Mountain elk through cross breeding.

Alternative Action Potentially significant impacts. High, double fencing is expected to work better for elk than for deer. Deer are highly adept at getting through and over fencing. Genetic testing cannot be relied upon to assure genetic purity (See 5.B.b.) of game farm animals. The location of the site, however, with its steep slopes, provides potential for ingress and egress which could lead to hybridization of wildlife associated with the site if hybrid animals are brought onto the proposed facility.

No Action Alternative: No impact.

e. Displacement and/or redistribution of wildlife populations from traditional seasonal habitat including migration corridors.

Proposed Action Potentially significant impact. As wildlife are prevented from using traditional areas, increased concentrations occur in adjacent areas resulting in overuse of other areas and possible depredation on adjacent private lands. Wildlife damage is a continuing concern of neighboring landowners. The proposed site could exacerbate this problem. As local wildlife is prevented from using the proposed site and deflected from the Beartooth Creek-Ming Bar travel corridor, use patterns of the herd units could be altered.

The proposed facility is located between five state and federal significant wildlife areas that have received special management designations. The game farm's impact, therefore, significantly exceeds the impact which it might have in another location.

While the Beartooth Creek-Ming Bar travel corridor is not the only site where wildlife are known to cross the Missouri River, for antelope it may be a vital link across a stretch of river. Without this passage point, travel in excess of 20 miles would be required. For other species, this travel corridor provides a natural, convenient crossing.

Alternative Action Potentially significant impact. In an effort to prevent nose-to-nose contact between captive and wild animals, high, double fencing would be necessary. Such fencing would increase the amount of land actually removed from wildlife use and increase the displacement of wildlife using the travel corridor.

No Action Alternative: No impact.

C. **Species potentially significantly impacted: For each wildlife species (or group of species) that would be potentially significantly impacted, state the factor(s) to which the impact(s) are attributed and address the following in narrative format.**

a. Estimated size of affected wildlife population(s).

Proposed Action: Potentially significant impacts.

ELK: The definition of "affected populations", for purposes of this analysis, begins with the elk herd segment that utilizes hunting district (HD) 839 but extends outward based on known animal movements. The elk population within hunting district 839 (HD in which the proposal occurs) is approximately 750 (see Map 7). Within a 10 mile radius of the game farm, six hunting districts occur, within which at least 3500 elk occur. Appendix F, provides winter survey information in various hunting districts that are connected to each other by virtue of overlapping elk herd units or dispersing elk from the Helena area. Winter surveys are done after the hunting season, but before the calving season, so total numbers given are approximately 30-35 percent lower than mid-summer populations. Based on distribution, bio-telemetry and dispersal information (Section 5.C.b.), potentially 16,000+ elk could be affected in 25 hunting districts covering 15,000 square miles. The connection to other elk herd segments extends beyond these hunting districts however.

MULE DEER: Approximately 750 mule deer occur in HD 839. The Sleeping Giant area (from Wolf Creek to the Hilger Hereford Ranch) is utilized by at least 350 mule deer as determined by winter aerial surveys. In the 8 hunting districts immediately surrounding Helena (Map 5: 835, 839, 843, 880, 892, 820, 293, and 215) approximately 10,000 mule deer occur.

MOOSE: Moose habitat is limited within hunting district 839, but moose do occur in the swamps surrounding the Sieben Ranch and along the Missouri River. Moose in 8 hunting districts immediately surrounding Helena number approximately 100.

WHITE-TAILED DEER: White-tailed deer have not been inventoried in the Helena area, but they do occur throughout the Helena area.

BIGHORN SHEEP: A bighorn sheep transplant was initiated into the Sleeping Giant area at the request of the Bureau of Land Management (Rau 1991). The now extinct Audubon sheep was native to the Missouri River corridor at least up to Upper Holter Lake. To enhance today's recreation and viewing opportunities of the area, the BLM requested that bighorn sheep be reestablished. The Sleeping Giant has long been classified by the federal government as an Area of Critical Environmental Concern. A portion of this area (6,487 acres) was recommended for Wilderness classification in 1991 and the rest remains in the ACEC classification (11,609 acres).

In December 1992, the first of 2 transplants was completed. The first transplant of 35 bighorns was followed in December of 1993 with an additional 32 sheep. The first comprehensive helicopter survey of the area was conducted in July 1994 when 53 sheep were observed. Not included in the survey were 3 sheep from this group that have taken up residence in the Birdtail Hills west of Hardy. Given the history of bighorn sheep transplants throughout the state, and the tendency for a percentage of the newly released animals to leave the site, in the first year after completion of the transplant, a population of 53 sheep reflects a stabilized herd that is now expected to increase (Glenn Erickson, Wildlife Division, pers.com).

MOUNTAIN GOAT: Mountain goats numbers have fluctuated between 17 and 54, and currently stand at 33. Mountain goats provide outstanding viewing opportunities along the nationally significant Lewis & Clark trail that follows the Missouri River along Beartooth Mountain.

Mountain goats have many unique characteristics among wildlife species. They are particularly curious creatures and yet steadfastly cling to traditional use areas, even in the face of major disturbance (Chadwick 1973, Joslin 1986). Their tendency not to forsake their home ranges renders them vulnerable to disturbance related stress that impact the successful rearing of off-spring (Joslin 1986).

PRONGHORN ANTELOPE: West of the Missouri River, a herd of approximately 95 antelope move back and forth across Interstate 15. East of the Missouri, on the Beartooth Wildlife Management Area, a group of up to 75 antelope occur (roughly 50 of these on Ming Bar) and interconnect with another 200+ antelope to the north in hunting district 445.

BLACK BEAR: Unknown numbers of black bear occur within Hunting District 839, however harvest records indicate that 40 bears were taken by hunters in 1993 within the Helena Resource Area (the area surrounding Helena). Bears are regularly observed by landowners in the Sleeping Giant area, and reports of a grizzly pursuing a cow elk in the immediate vicinity of the proposed game farm, was reported to FWP by a landowner in 1993. Reports of a grizzly crossing Interstate 15 have also been received, and a likely grizzly observation was made by FWP personnel 12 miles northeast of the proposed site.

MOUNTAIN LION: Unknown numbers of mountain lions occur within Hunting District 839. The number of lion reports has been increasing over the last several years, and the lion population is reported by hunters and landowners in HD 839 to be particularly healthy and increasing. Mountain lions have been frequently observed in and around the Sleeping Giant.

GRAY WOLF: Few in number but likely travels through the Sleeping Giant area. Wolf sightings have been reported as close as Holter Dam, and in 1994 a wolf was taken by the U.S. Fish & Wildlife Service in a trap set for coyotes on a nearby ranch.

SMALL MAMMALS AND BIRDS: Unknown numbers. The Montana Natural Heritage Program provided a list of vertebrate species (383 records) that are known to occur in Lewis and Clark County (Appendix G). The following numbers of vertebrates are listed and certain species have received designations citing rarity: 6 species of amphibians (1 species designated as rare and may be listed as threatened or endangered); 286 species of birds (19 species have a designation of some type of rarity and may receive threatened or endangered status); 22 species of fish (2 have sensitive designations and may receive threatened or endangered status); 61 species of mammals (5 have sensitive designations and may receive threatened or endangered status); 8 species of reptiles.

b. Year-round distribution of affected wildlife population(s).

Proposed Action: Potentially significant impacts.

ELK: Elk are widely distributed throughout the Helena area. Distribution of elk displayed on Map 4 represents country that elk either seasonally concentrate in, or pass through between seasonal use areas.

Radio-marked animals demonstrate that elk home ranges virtually blanket elk habitat across the hunting districts in the greater Helena area and overlap to the extent that all "elk herd segments" ultimately are interconnected (Map 5). Several radio-marked elk in the Helena area have dispersed from the area in which they were marked (DeSimone and Vore 1992, Fiest and Williams in prep., Hurley 1994, Joslin 1989, 1991, in prep., T. Carlson pers com., Spence 1975, D. Hook pers. com.). These elk move from the area in which they were marked, migrating to a new area in which they take up residence; or, they make distant forays then returned to their original location. These dispersal movements indicate that even the Missouri River is not a barrier to movement. Groups of elk have even been observed swimming the river on occasion (T. Carlson, Wildlife Biologist, pers. com, Map 5).

Over two thousand elk have been radio-marked across the state of Montana in the last 25 years (Terry Lonner, Research Bureau, MDFWP, pers. com). The movements of some of these animals is depicted on Maps 5 & 6. The biotelemetry data base taken as a whole within the state of Montana would be able to demonstrate that dispersing elk, together with normal home range overlap that occurs between elk herds, reveals constant, extensive and pervasive connections between all elk herds within the state, and beyond.

MULE DEER: Information gathered from mule deer studies in Montana indicate that, as with elk, mule deer herds come in contact with one another in the progressive fashion that elk herds do. Extensive mule deer home range movements have been recorded, as well as quantification of dispersing animals (Ihsle 1982, Pac et al. 1991). Map 4 demonstrates that mule deer are ubiquitous, occurring even within the city limits of Helena, as well as all of the surrounding country. A mule deer doe and fawn were observed swimming the Missouri River in August 1994 (Joslin, Wildlife Biologist MDFWP).

MOOSE: Moose occurrence in the Helena area is concentrated in the south, and limited to riparian zone corridors to the north, particularly along Little Prickly Pear Creek as far north as the Sieben interchange on Interstate 15 (Map 3).
Moose have been observed swimming the Missouri River in the vicinity of the Sleeping Giant (J. Williams, Wildlife Biologist MDFWP, pers. com., summer, 1994.) Moose are occasional visitors to the Beartooth WMA, and likely interconnect with established moose populations to the east and south of the Gates of the Mountains Wilderness (Graham Taylor, Wildlife Manager MDFWP, pers. com.).

WHITE-TAILED DEER: Whitetails occur throughout riparian zones and onto mountain foothills within hunting district 839 (Map 3), and in all surrounding districts. Specifically, whitetails occur in all the drainages emanating from Little Prickly Pear Creek and are known to cross the Missouri River in predictable locations, including the Beartooth Creek-Ming Bar corridor.

PRONGHORN ANTELOPE: Pronghorns are distributed throughout the prairie-foothills habitat in all hunting districts surrounding the proposed game farm (Map 2) and utilize a critical travel corridor across the Missouri River between Beartooth Creek (site of the proposed game farm) on the west side of the river and Ming Bar on the Beartooth WMA, east of the Missouri. Pronghorns have been observed swimming the river from Ming Bar to the Sleeping Giant as recently as May 1994 (Dave Yerk, Fisheries Biologist MDFWP, per. com.).

BLACK BEAR: Black bears occur throughout the hunting district and in all districts surrounding Helena. Black bears occur on the Sleeping Giant during all seasons of the year and probably den on northerly slopes of the mountain.

MOUNTAIN LION: Mountain lions occur throughout the hunting district and in all districts surrounding Helena. Mountain lions occur on the Sleeping Giant and all surrounding drainages and hunting districts. Since the Sleeping Giant is winter range for mule deer, antelope, bighorn sheep, mountain goats and elk, it offers a strong prey base, and so mountain lions are common inhabitants of the area, including Beartooth Creek. See Section 5.a.c. for discussion of lions crossing game farm fences.

SMALL MAMMALS AND BIRDS: Occurrence and distribution of hundreds of small mammals and birds known to exist within this area of Montana have not been summarized or analyzed relative to potential impacts of the proposed game farm. The list of vertebrate species provided by the Montana Natural Heritage Program (383 records) that are known to occur in Lewis and Clark County (Appendix G) does not provided distribution information.

Additional evaluation of the impacts of the proposed site on vertebrates would be beneficial.

c. Characterization of wildlife use (year round v. seasonal) of the area to be impacted, including reference to any special habitat features.

Proposed Action: Potentially significant impacts. Mule deer heavily use the Beartooth-Upper Holter Basin at all seasons of the year. Antelope are spring-summer-fall inhabitants of the upper basin in the vicinity of proposed pens #3 and #4. Mountain goats often will move south off the Sleeping Giant into section 15, approximately one mile east of Pen #3 to take advantage of a view of the river from a high point. Goats frequent the "chest" of the Sleeping Giant and can be observed at this site any time of the year -- also within 1 mile of the proposed game farm. Bighorn sheep utilize the entire river corridor from south of the Meriweather Campground to beyond Holter Dam. Since individuals are still establishing seasonal home ranges, it is likely that bighorns will come into close contact with the site of the proposed game farm. Elk utilize the Beartooth-Upper Holter Lake Basin to a limited extent, but can be located in the basin throughout the year. Radio-marked elk have revealed established home ranges within 1½ mile of the proposed game farm, and wandering bulls, particularly during rut are likely to be attracted to penned females in heat. All manner of predators, including black bear, mountain lions, and possibly grizzly and wolves could be attracted to the site. Most certainly black bears and lions will be regular inhabitants of Beartooth Creek if the lure of penned prey species becomes reality.

The Beartooth Creek drainage offers extreme and diverse topography and thus a variety of wildlife habitat in a small area. The north side of the drainage rises vertically over 2,200 feet in less than 1¼ mile, providing high-

quality mountain goat and bighorn sheep habitat, while the south side of the drainage consists of rolling hills with interspersed grasslands and Ponderosa pine stands that sustain antelope and mule deer. Although small, Beartooth Creek provides a constant source of water along the south side of the Sleeping Giant and thus offers a corridor for species generally linked to riparian zone habitats such as whitetail deer, moose and bear. The broken nature of the terrain and vegetation, along with abundant wildlife, provides mountain lion habitat. A low pass between the Hilger Valley and the Missouri River exists less than 500 yards from the proposed game farm site, and provides a natural travel corridor for all species of large mammals within the area, and nesting habitat for a variety of raptors.

Nesting birds, particularly those requiring Ponderosa pine, such as the classified sensitive flammulated owl, and pileated, hairy and downy woodpeckers would be individually and cumulatively affected with removal of trees. A red-tailed hawk nest occurs in the northwest quarter of section 16, on Department of State Lands property, about 300 yards north of the proposed site of Pen #2. Timber harvest is currently occurring and more is planned as part of the property clearing for the fenceline corridor.

No Action Alternative: No impact.

d. Proportion (%) of the total habitat area that is currently used, that will be enclosed or otherwise impacted.

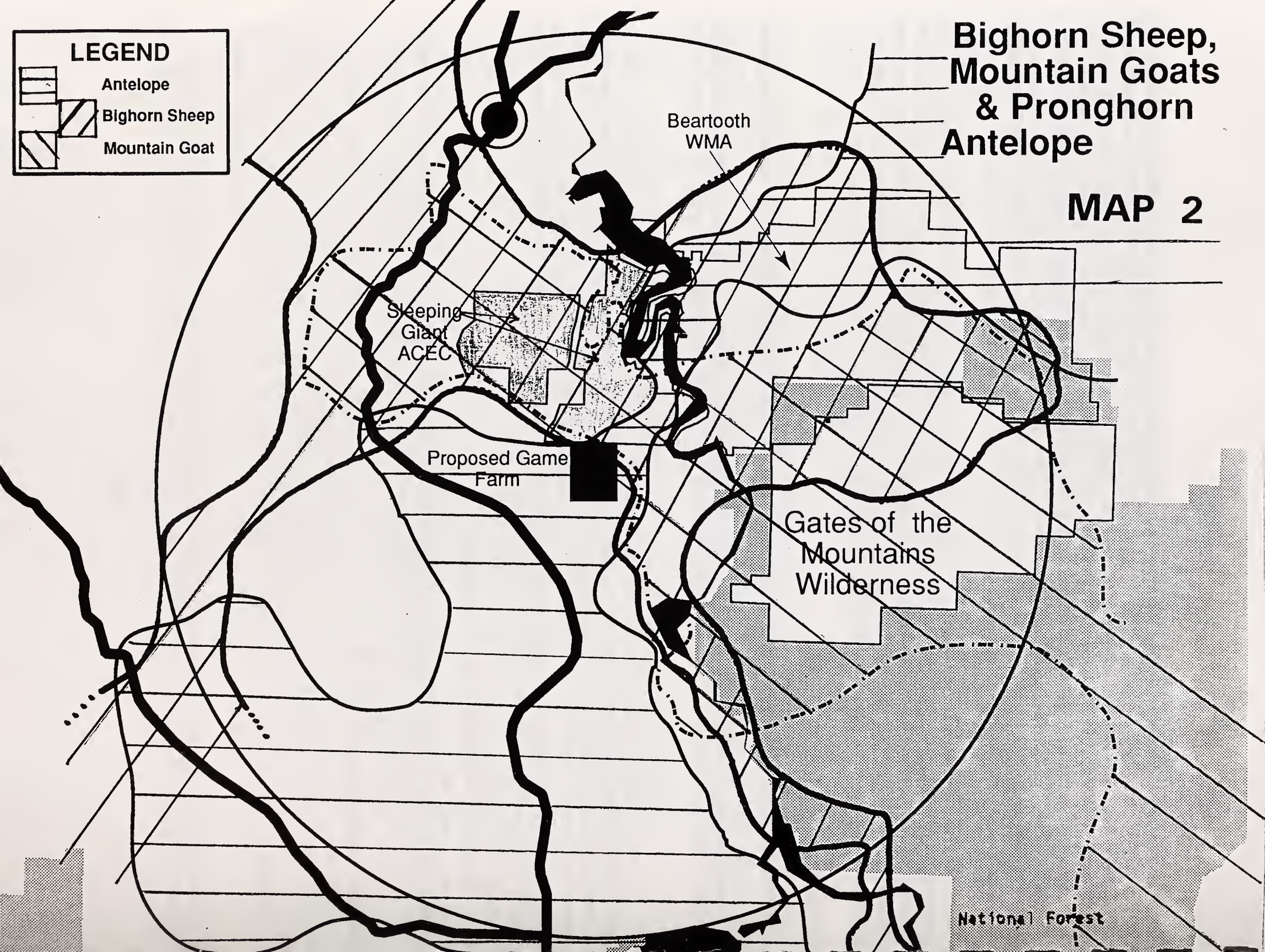
Proposed Action: Potentially significant impacts. The travel corridor between Beartooth Creek and Ming Bar is approximately two miles wide across sections 21 and 22. The proposed facility is located in sections 16 and 21.

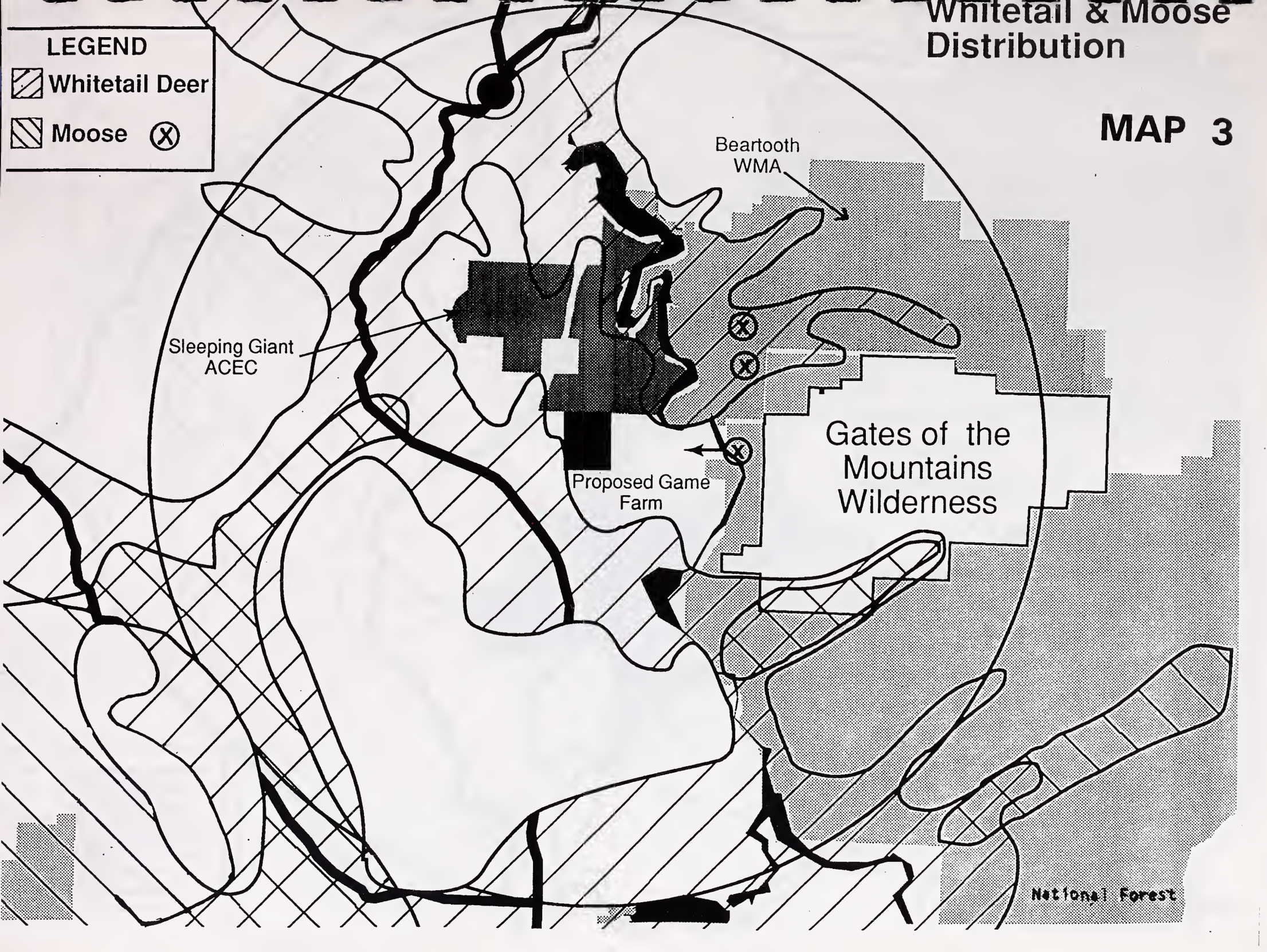
On a statewide basis, the site affects a relatively small area. However for mountain goat and bighorn sheep, species with naturally limited distribution, and local, possibly isolated populations on the Sleeping Giant, potential impacts of disease or disease control measures could significantly impact these herds. For those species with wider distribution, the consequences of widespread disease could have a far more broad impact as it spread between herds across various hunting districts or as government officials attempted to control the spread of disease through elimination of wildlife herds.

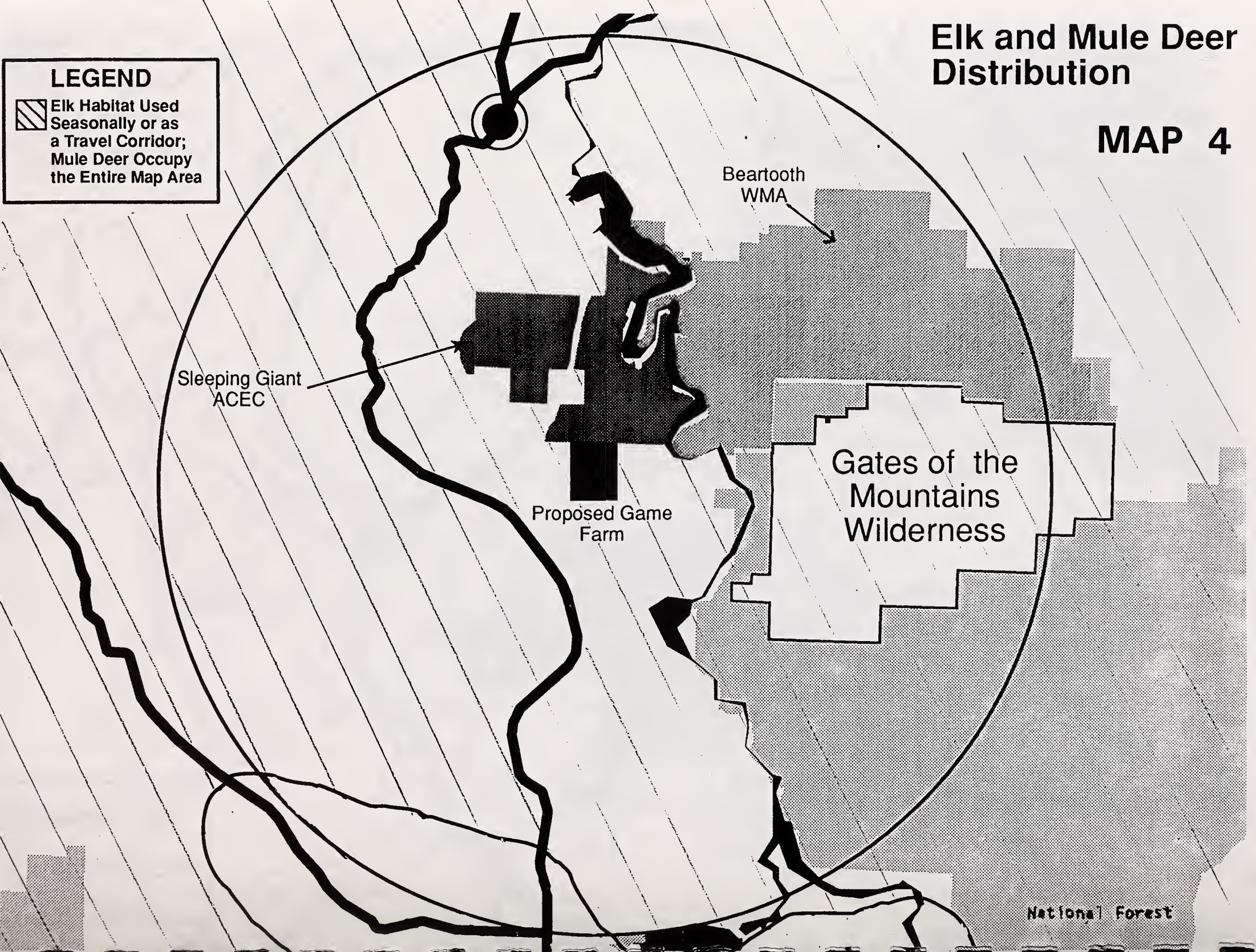
It is unknown whether impacts can be mitigated.

Alternative Action: Potentially significant impacts. With double 12 foot fencing, the results would be somewhat greater than the proposed action because of the increase in habitat taken out of wildlife use.

No Action Alternative: No impact.

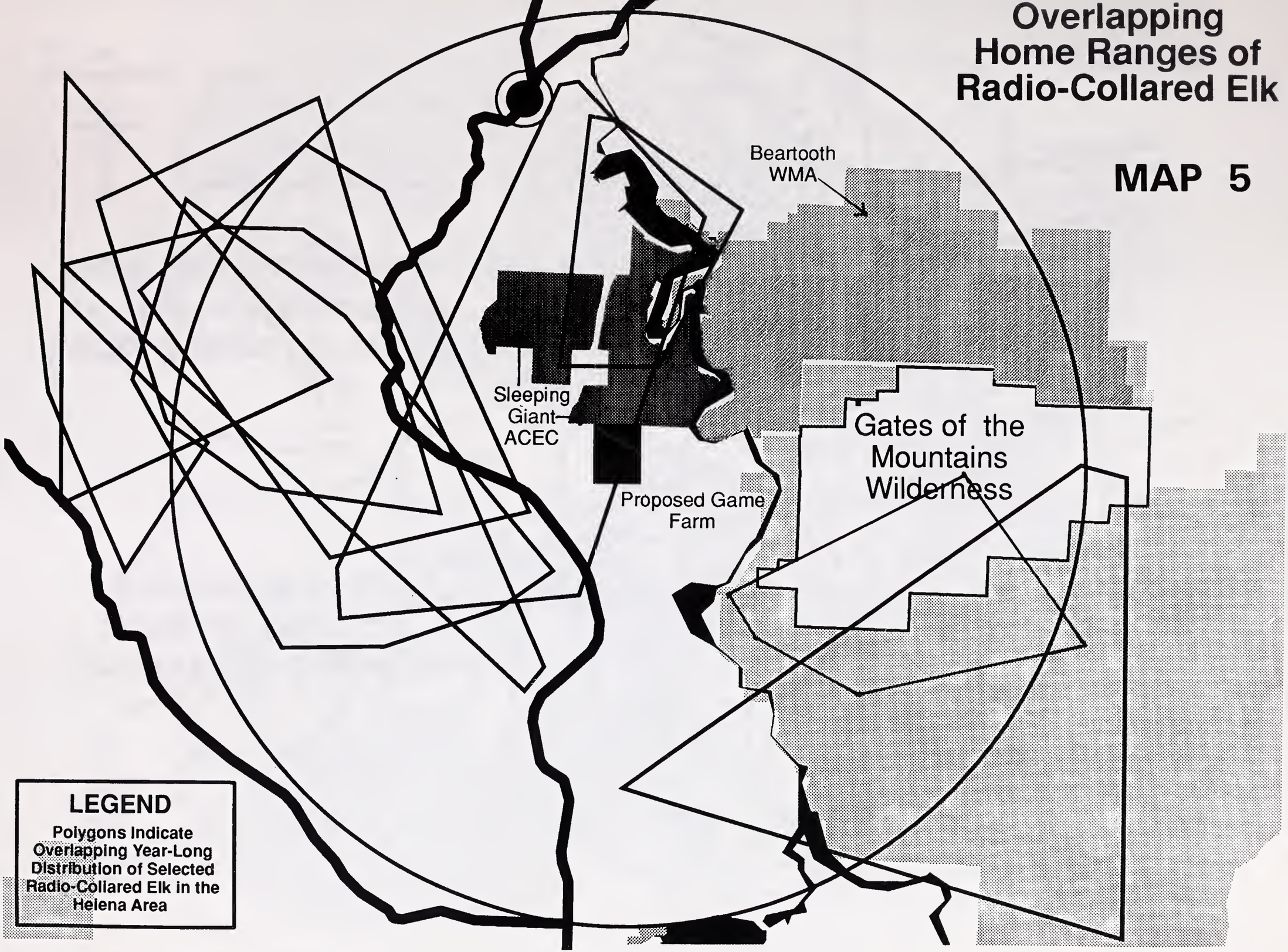

LEGEND
Antelope
Bighorn Sheep
Mountain Goat
Bighorn Sheep, Mountain Goats & Pronghorn Antelope
MAP 2
Beartooth WMA
Sleeping Giant ACEC
Proposed Game Farm
Gates of the Mountains Wilderness
National Forest


LEGEND
Whitetail Deer
Moose
Whitetail & Moose Distribution
MAP 3
Beartooth WMA
Sleeping Giant ACEC
Proposed Game Farm
Gates of the Mountains Wilderness
National Forest


LEGEND
Elk Habitat Used Seasonally or as a Travel Corridor; Mule Deer Occupy the Entire Map Area
Elk and Mule Deer Distribution
MAP 4
Beartooth WMA
Sleeping Giant ACEC
Proposed Game Farm
Gates of the Mountains Wilderness
National Forest

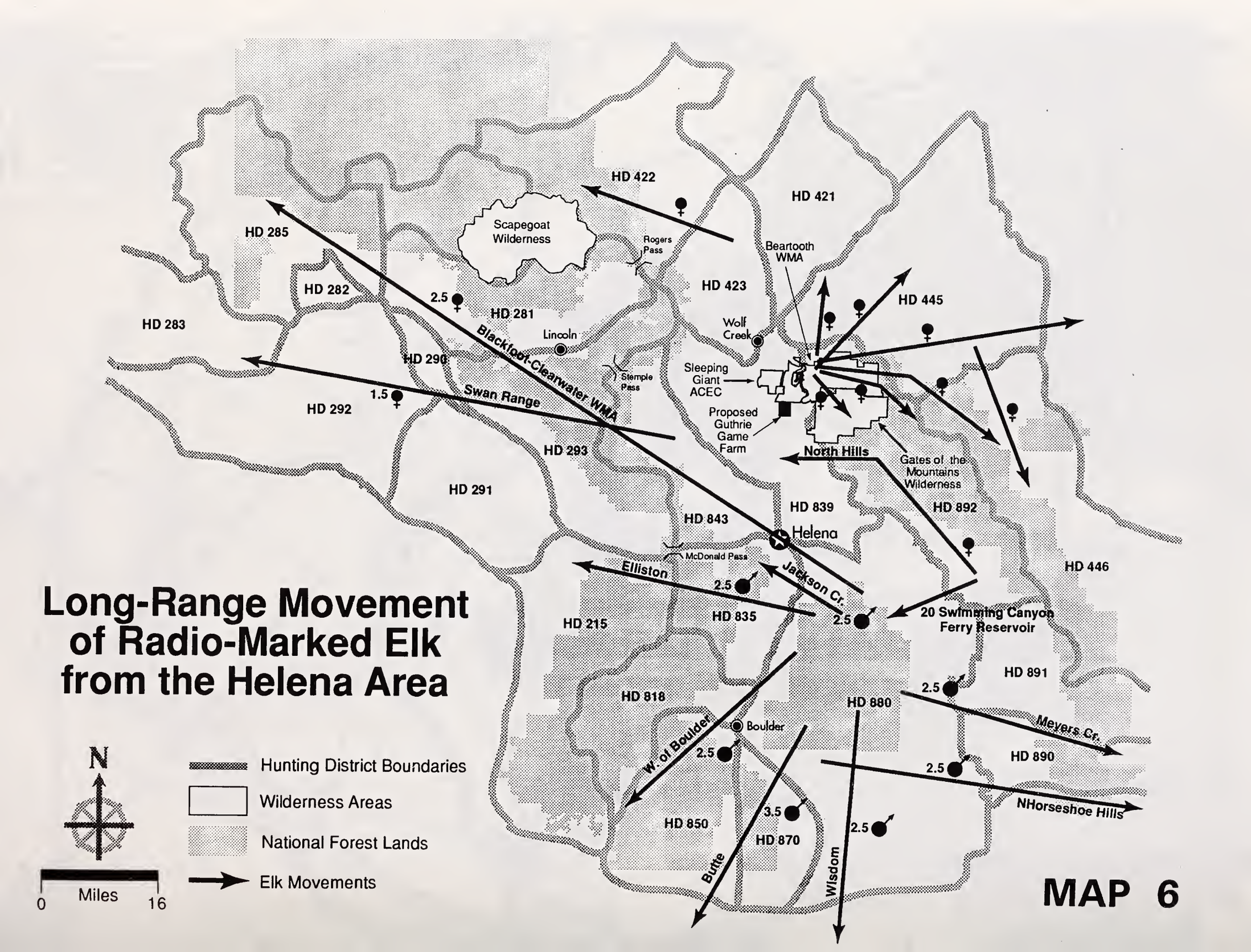
Overlapping Home Ranges of Radio-Collared Elk

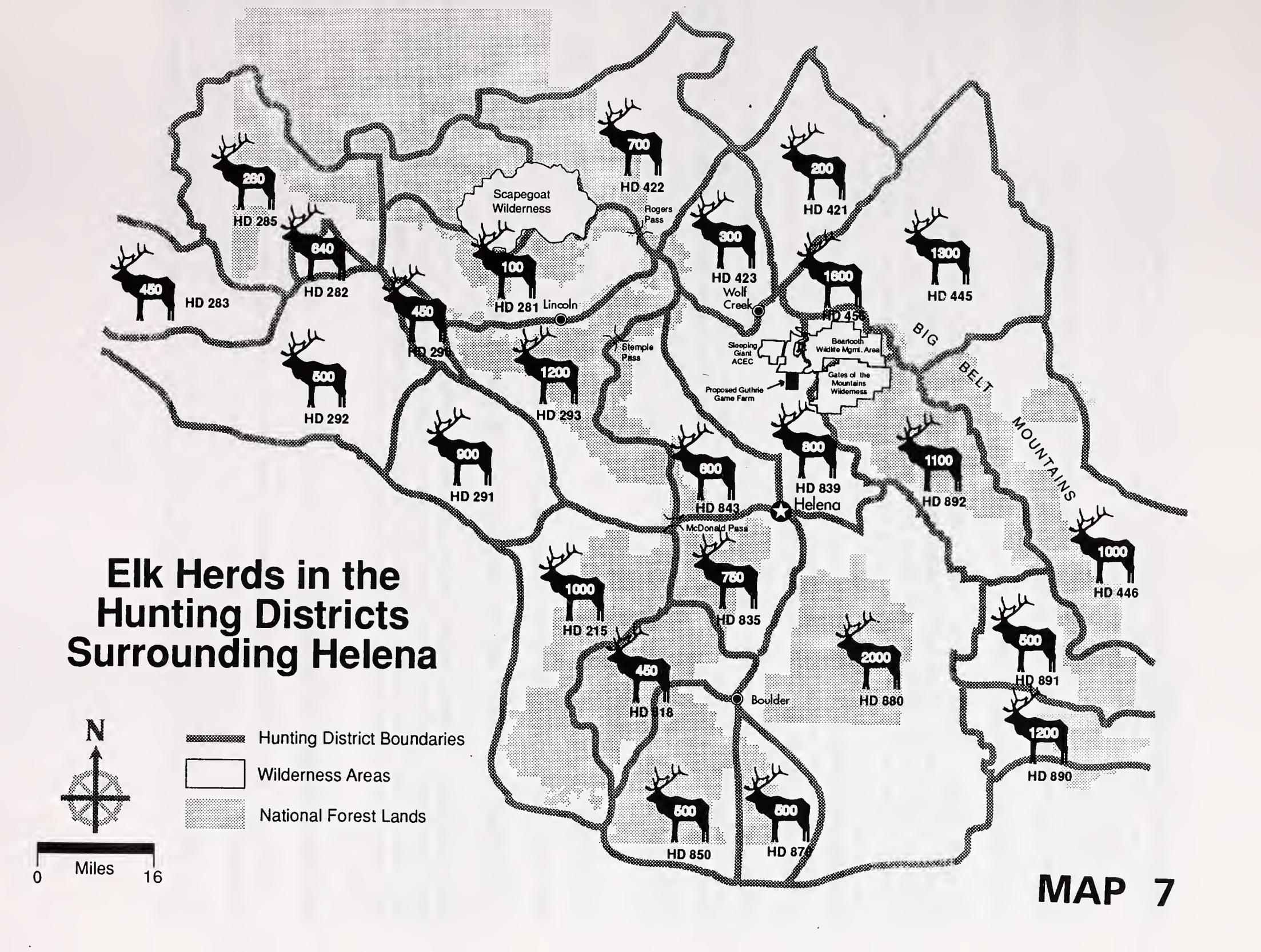
MAP 5



LEGEND

Polygons Indicate Overlapping Year-Long Distribution of Selected Radio-Collared Elk in the Helena Area


Long-Range Movement of Radio-Marked Elk from the Helena Area
HD 422
HD 421
HD 285
Scapegoat Wilderness
Rogers Pass
Beartooth WMA
HD 282
HD 423
HD 445
2.5
HD 281
HD 283
Wolf Creek
Lincoln
Blackfoot-Clearwater WMA
HD 290
Stemple Pass
Sleeping Giant ACEC
1.5
Swan Range
HD 292
Proposed Guthrie Game Farm
North Hills
Gates of the Mountains Wilderness
HD 293
HD 291
HD 839
HD 892
HD 843
Helena
McDonald Pass
HD 446
Elliston
Jackson Cr.
2.5
2.5
HD 215
HD 835
20 Swimming Canyon Ferry Reservoir
HD 891
2.5
HD 818
HD 880
Boulder
Meyers Cr.
W. of Boulder
2.5
HD 890
2.5
NHorseshoe Hills
3.5
HD 850
2.5
HD 870
Butte
Wisdom
N
Hunting District Boundaries
Wilderness Areas
National Forest Lands
Elk Movements
0
Miles
16
MAP 6


Elk Herds in the Hunting Districts Surrounding Helena
280
HD 285
640
HD 282
450
HD 283
100
HD 281
Lincoln
700
HD 422
Scapegoat Wilderness
Rogers Pass
200
HD 421
300
HD 423
Wolf Creek
1600
HD 456
1300
HD 445
BIG BELT MOUNTAINS
Sleeping Giant ACEC
Beartooth Wildlife Mgmt. Area
Gates of the Mountains Wilderness
Proposed Guthrie Game Farm
Stemple Pass
450
HD 29
500
HD 292
1200
HD 293
900
HD 291
800
HD 839
Helena
600
HD 843
1100
HD 892
McDonald Pass
1000
HD 446
1000
HD 215
760
HD 835
2000
HD 880
500
HD 891
450
HD 818
Boulder
1200
HD 890
600
HD 850
600
HD 870
N
Hunting District Boundaries
Wilderness Areas
National Forest Lands
0
Miles
16

MAP 7

HUMAN ENVIRONMENT

7. NOISE EFFECTS

Will the proposed action result in:

a. Increases in existing noise levels?

Proposed Action: Minor Impact. Noise associated with the construction and operation of the facility, transportation of animals and related traffic associated with the game farm operation and the discharging of firearms associated with shooting game farm animals are potential minor impacts. Depending on frequency of animal transport or increased traffic resulting from the game farm, this impact could be minor to negligible.

No Action Alternative: No impact.

b. Exposure of people to severe or nuisance noise levels?

Proposed Action: Minor Impact. There would be minor impact only to those working on the site, or neighbors at times of transport of animals and related traffic associated with the game farm operation. Depending on frequency of shooting on the property, impact may be elevated. Hunting has historically taken place in this area.

No Action Alternative: No impact.

8. LAND USE

Will the proposed action result in:

a. Alteration of interference with the productivity or profitability of the existing land use and an area?

Proposed Action: Potentially significant impact. The establishment of a family owned business (game farm) has the potential to be beneficial to the owner without significantly altering the nature of the land except for the concentration of animals in a relatively small area. The proposed site currently has one residence and has been operated as a cattle ranch in the past. Presently, the applicant is pasturing horses south of the proposed facility site.

No Action Alternative: No impact.

b. Conflict with a designated wildlife management area, natural area or area of unusual scientific or educational importance?

Proposed Action: Potentially Significant Impacts. The Beartooth WMA was purchased by the Montana Fish and Game Commission in 1970. Its rich and colorful history, beginning with the 1805 journal of Lewis and Clark

depicting the "big-horned animals on the immensely high and perpendicular cliff opposite to us..." is documented in: Management Plan for Beartooth WMA (McKelvey and Fiest 1985). The Beartooth WMA covers 32,318 acres bordering the Missouri River and Holter Lake for 12 miles on its west and southwest boundary.

The WMA is yearlong or seasonal range for elk, mule deer, mountain goat, antelope, bighorn sheep, game birds and waterfowl. Its stated purpose is to provide quality wildlife range for these species and recreational opportunities to the people of Montana.

No Action Alternative: No impact.

c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?

Proposed Action: Potentially significant impacts. In addition to the Beartooth Wildlife Management Area, the Gates of the Mountains Wilderness Area (28,562 acres) adjoins the WMA on the south, and the Sleeping Giant proposed wilderness area and Area of Critical Environmental Concern adjoin both the Beartooth WMA and the Gates of the Mountain Wilderness Area via the Missouri River. Both sides of the Missouri River from Upper Holter lake down to the Beartooth WMA are designated as the Gates of the Mountains Game Preserve. The proposed site adjoins the BLM's designated wilderness study area and is within two miles of the Beartooth WMA, three miles of the Gates of the Mountain Wilderness Area, and 2½ miles of the Gates of the Mountains Game Preserve. The game farm also adjoins Montana Department of State lands property in Section 16 and 28. As stated in the Fish and Wildlife section of this assessment, there are several potentially significant impacts. Whether management direction for all the designated lands surrounding the game farm can be guaranteed is in question.

No Action Alternative: No impact.

d. Conflict with any existing land use that would be adversely affected by the proposed action.

Proposed Action: Unknown. Ranching is the predominant land use in the area along with wildlife habitat and public wilderness/resource and recreation areas. The potential for disease transmission to domestic livestock nearby via direct contact, exposure to infected water, or exposure to infected waste exists. This potential may be reduced through proper game farm stock health monitoring, operations and management practices, and facility design. It is uncertain if the risk can be eliminated or reduced to levels acceptable to neighboring land owners.

Year-round shooting opportunities could add potential aesthetic impacts. The views of the facility from surrounding public lands could negatively affect recreational users. Residents of the valley may object to the presence of a concentrated animal operation in the vicinity.

Alternative Action: A measure that could be imposed to minimize concern generated from the potential year-round shooting preserve would be to coincide shooting times with the general hunting season.

No Action Alternative: No impact.

e. **Adverse effects on or relocation of residences?**

Proposed Action: Unknown. One downstream residence uses groundwater as a drinking water source and surface water for livestock watering. The proposed location of the game farm has the potential to contaminate surface and ground water that could affect downgradient users. The Montana Department of Health and Environmental Sciences did not have sufficient information to thoroughly evaluate this water quality issue.

No Action Alternative: No impact.

9. RISK/HEALTH HAZARDS

Will the proposed action result in:

a. **Risk of dispersal of hazardous substances (including, but not limited to chemicals or pathogens) in the event of an accident or other form of disruption?**

Proposed Action: Unknown. Application materials do not indicate any hazardous substances will be housed on the proposed development. Fuels and chemicals which may be stored on site such as insecticides and herbicides are normally purchased in volume and could present a potential hazard if not stored properly. There remains potential risk of pathogen dispersal to surface and ground water from game farm animals. Feces and afterbirth pose significant risk to native wildlife and livestock if disease is present and transmitted between free-ranging and captive wildlife.

Alternative Action: Fecal material should be collected, bagged and properly disposed of at a protected site not frequented by native wildlife, domestic livestock or humans. Calving afterbirth, aborted fetuses, dead animals, and other such materials should be collected and disposed of at a site not utilized by wildlife, livestock or humans in compliance with state and local codes. All animal deaths should be reviewed by a veterinarian prior to disposal of the carcass. Best management practices for water protection should be implemented and maintained.

No Action Alternative: No impact.

b. **Creation of any hazard or potential hazard to domestic livestock?**

Proposed Action: Potentially significant impacts . The threat of disease transmission from captive cervids to domestic livestock is an issue of significant concern to area ranchers. Potential exists for transmission of disease and/or parasites to domestic livestock from captive elk through numerous vectors (air, water, contaminated soil, etc). Cattle may come in contact with game farm animals should fences breach, or livestock range into the facility area. Transmission of disease or parasites, particularly bovine tuberculosis, leptospirosis or brucellosis through direct contact with wildlife that have been in contact with the game farm animals or their feces remains a possibility. Transmission of tuberculosis to free-ranging wildlife populations could have far reaching, serious impacts (Appendix E). Area ranches include the Carrie-Hilger Ranch, Hilger Hereford Ranch, Sieben Ranch

as well as DSL and BLM grazing permitees who run livestock on state and federal land adjacent to the proposed site.

Assessment of the disease transmission potential posed by any herd of captive cervids is hampered by deficiencies in existing disease testing procedures when they are applied to cervids. The reliability of test results in cervids compared to livestock is significantly lower. Some diseases such as paralaphostrongylus tenuis, lack accurate diagnostic tests. Diagnostic tests remain to be developed for a number of wildlife diseases (Appendix E). Tests for tuberculosis in cervids have improved but are not 100% accurate. Post-mortem exam is often the best diagnostic method for identification of disease in game farm animals.

Alternative Action: Potentially significant impacts. Feces removal; afterbirth and calving remnants collected and disposed of in an area not utilized by native wildlife or domestic animals, and approved by County and Department of Health and Environmental Sciences for disposal of potentially diseased materials could be a condition of licensing. A fence inspection/maintenance program would reduce the potential for ingress and egress of captive and non-captive animals. If certain highly contagious diseases were to be transmitted from the game farm, the impact could not be mitigated without a serious reduction in wild game populations and an extensive monitoring program. There is the possibility that impacts may not be able to be mitigated.

No Action Alternative: No impact.

c. Creation of any human health hazard or potential hazard?

Proposed Action: Potentially significant impacts. Some of the more common diseases that humans are capable of contracting from wildlife include brucellosis (undulant fever) and bovine tuberculosis. In the Animal Health Addendum to Appendix E, the statement is made that "Bovine tuberculosis poses a substantial human health threat. If Montana wildlife populations were to be infected with Tb, hunting and other wildlife-related recreational activities that are currently public assets would be transformed into human health hazards".

An outbreak of tuberculosis among people in contact with farmed elk has been documented in Canada. The epizootic was first recognized in November, 1990, in a herd of 150 animals but was subsequently found to be widespread in elk throughout the province, involving 32 of 110 registered herds. Epidemiologic investigation identified 446 human contacts including farmers, veterinarians, post-mortem technicians, meat inspectors, and workers at rendering plants and tanneries. Eighty-one of these has positive tuberculin skin reactions; 6 had converted to positive when tested a second time, and a veterinary surgeon who treated a severely affected elk developed active, respiratory disease. The mode of transmission from farmed elk to man was determined to be likely due to aerosolization of infected particles from diseased animals.

The proposed facility presents other potential risks to human health. If adequate runoff controls are not used on the site, the possibility of fecal and other materials to be washed from enclosures into Beartooth Creek is high. Concentrated animal areas pose the risk of a number of diseases that humans can contract. These include *chryposporidiosis* (a protozoan parasite found in most vertebrates) and *E coli enteritis*, a bacterium traced to cattle, and salmonella. The location and topography of the site has the potential to funnel runoff towards the creek thus concentrating pathogens which may be present. (Todd Damrow, State Epidemiologist, DHES, personal communication.)

Alternative action: Potentially significant impacts. Locating feeding and quarantine areas at least 100 feet from the creek and ponds is recommended to reduce this impact. The use of proven and effective runoff controls in areas where vegetation has been eliminated, and the collection and appropriate disposal of feces and other by-products of the operation may reduce risks to human health .

No Action Alternative: No impact.

d. Creation of any safety hazard to nearby dwellings, residents or recreationists as a result of firearms discharge on the premises of the proposed game farm?

Proposed Action: No impact. There are no residences immediately adjacent to the proposed facility that would be affected. The proposed site is surrounded by undeveloped private property.

No Action Alternative: No impact.

10. COMMUNITY IMPACTS

Will the proposed action result in:

a. Alteration of the location, distribution, density, or growth rate of the human population of an area?

Proposed Action: Unknown impacts. Additional residences may be constructed in the vicinity but no discussion of residential development was included in the application. Some adjacent ranches have entered into conservation easements which preclude subdivision of their property.

No Action Alternative: No impact.

b. Alteration of the social structure of a community?

Proposed Action: Minor impact. It would not be expected that the siting of this facility would significantly alter this community's social structure. The proposed facility is generally considered to be a concentrated agricultural operation.

No Action Alternative: No impact.

c. Alteration of the level or distribution of employment or community or personal income.

Proposed Action: Minor impact. Fuels, agricultural supplies and other materials purchased to construct and maintain the facility would bring additional dollars into the community.

No Action Alternative: No impact.

d. Changes in industrial or commercial activity?

Proposed Action: Minor impact. Minor change from traditional agricultural operation to game farm animal ranching.

No Action Alternative: No impact.

e. **Changes in historic or traditional recreational use of an area?**

Proposed Action: Unknown but potentially significant impacts. The proposed game farm could affect recreational users in the surrounding area. The proposed site historically has been used for agriculture and is currently posted against trespassing (public use). Adjacent landowners, however have traditionally allowed varying degrees of public use. Some are Block Management cooperators. BLM and USFS lands offer considerable recreation to the general public. As previously discussed, there is a potential for change in traditional wildlife use of the area which could affect recreation in the area.

Other considerations associated with recreation in the area may be affected. Appendix H illustrates the economic contributions of deer and elk hunting in the Helena area through both net expenditures and net value. "Expenditures" include food, lodging, gasoline, those items actually purchased in the community. It does not include the cost of the hunting license. "Net value" (net willingness to pay) is a measure of value in benefit cost analysis that is often used as a standard (Brooks, 1988). "Net value" is the value of the hunt to the average hunter, i.e. the level at which he/she values the hunting experience. The expenditure and net value figures are based on standard economic practices (Brooks, 1988; Brooks, 1988) using 1989 dollars, but were adjusted upwards using 1993 dollars and the Consumer Price Index (Brooks, FWP Economist, pers.com.)

Eight hunting districts (HDs) immediately surrounding Helena were used to evaluate economic conditions generated by local deer and elk populations. Economic values are calculated based on hunter days spent within each hunting district. Hunter numbers and hunter days are calculated through the statewide hunter participation and harvest surveys conducted annually. 1993 hunter harvest survey information was used. See Section 5.C.e.

No Action Alternative: No impact.

f. **Changes in existing public benefits provided by affected wildlife populations and wildlife habitats (educational, cultural or historic)?**

Proposed Action: Potentially significant impacts. The proposed action could alter current wildlife populations in area. Wildlife is considered an extremely important attribute of Wilderness recreation, the Missouri River boating experience, and the primary purpose for the existence of the Beartooth Wildlife Management Area. There would also be an impact associated with the view from the proposed Sleeping Giant Wilderness to a concentrated animal use facility, which may be viewed as negative. Alternately, people wishing an opportunity to view and photograph game farm animals may consider the game farm operation positive.

No Action Alternative: No impact.

g. **Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?**

Proposed Action: Unknown. May result in increased traffic flows on road which passes Carrie-Hilger Ranch.

No Action Alternative: No impact.

11. PUBLIC SERVICES/TAXES/UTILITIES

Will the proposed action:

a. Have an effect upon or result in a need for new or altered services provided by FWP and Dept. of Livestock to accomplish regulation of the game farm industry (inspections, animal counts, disease testing and monitoring, tattoo inspections, etc.)

Proposed Action: Potentially significant impacts. Increased inspection and monitoring efforts by law enforcement and wildlife personnel from the administrative region would be required. Responding to incidents of escapes, disease or other game farm related problem may also be necessary with costs to the MDFWP and Department of Livestock as a result. (Appendix I) These costs could be significant because of the large game animal populations in the area. Disease monitoring could include testing of 10 to 15% of the population at risk. As previously discussed, the costs for controlling a disease outbreak can be significant.

Alternative Action: Potentially significant impacts. Increase or redirection of staff and operations funding or efforts for regional law enforcement and wildlife personnel in order to adequately oversee game farm compliance could result in the setting aside of other FWP duties.

Monitoring: Economic information provided by Colorado Division of Wildlife (Richard Kahn, 1991) discloses that the costs of monitoring game farms in that state is $200,000 annually just for the people involved. No operations expenses were provided. A Montana game farm license costs $200 initially and $50 per year thereafter. Montana's 94 game farms generate less than 2.5% of the necessary revenue to oversee/monitor the operations. Monitoring of the proposed facility would cost upwards of $5,000/yr in personal services and operational expenses. This cost is estimated upon 12 unscheduled ground and aerial inspections of the facility. The cost estimate does not include testing game farm animals.

Animal Destruction Compensation: Montana Statute (81-2-201, MCA) provides for compensation to livestock owners whose stock become diseased and are ordered destroyed by the Montana Board of Livestock. Alberta and Colorado, who both have statutes have paid $14.5 million and $0.5 million in indemnity payments. In Montana, game farmers could also receive indemnity compensation. Montana law provides compensation for animals ordered destroyed by the Board of Livestock due to disease. (§ 87-2-201, MCA) The Board of Livestock pays $50 and MDFWP has agreed to match that amount whenever game farm animals are ordered destroyed. (Game Farm Workshop, Boise, ID, March 1992).
Recent efforts to identify the extent and to control an outbreak of TB on an east Montana game farm has so far cost over $58,000.

Holding facilities: Adequate state holding facilities must be identified to care for confiscated animals. Financial resources to cover these needs are not currently available.

No Action Alternative: No impact.

b. Have an effect upon the local or state tax base and revenues?

Proposed Action: Potentially significant impacts. The game farm will be a business with an individual profit potential. The property would remain taxed at an agricultural level and it is unknown how it will specifically affect the tax base. Game farm elk are valued from $2500 upwards which could provide a significant new tax source for the county. Should a disease outbreak occur, significant impact to the local or state tax base and revenues could be affected by the need to eliminate animals from the captive herd as well as free-ranging wildlife and neighboring domestic stock. Disease transmission would result in a loss of hunter opportunities in the area.

No Action Alternative: No impact.

c. Result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems or communications?

Proposed Action: Minor impacts. The game farm is not expected to require significantly expanded utilities.

No Action Alternative: No impact.

12. AESTHETICS/RECREATION

a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?

Proposed Action: Minor impacts. The proposed game farm is not visible to the general public from the highway or the river. The site would be visible to wilderness or public land recreation users from Beartooth Mountain.

No Action Alternative: No impact.

b. Alteration of the aesthetic character of a community or neighborhood?

Proposed Action: Minor impacts. There will be no visible changes in the aesthetics of the area. Local residents, however, have expressed concern about the idea of having a concentrated animal use operation in the area.

No Action Alternative: No impact.

c. **Changes of the quality or quantity of recreational opportunities and settings.**

Proposed Action: Unknown impacts. The game farm operation will not affect the quantity or quality of recreational opportunities unless there are problems with disease which require major containment efforts similar to those utilized in eastern Montana on the Elk Valley Game Farm. The proposed site will remain closed to the general public for recreational use.

No Action Alternative: No impact.

d. **Other.**

Proposed Action: Potentially significant impacts. Economic Analysis of elk hunting in Hunting Districts Surrounding the Helena Area. The annual net value of elk hunting in Hunting District 839 to the hunting public is estimated at approximately $747,000 (Brooks, R. 1988a.; Brooks, R. MDFWP Economist, pers. com.: dollar amounts indexed upward using the Consumer Price Index). The net value of a day of elk hunting is $88.41. Net value does not include what the hunter actually spends while hunting; rather the net value is what hunters say it is worth to them to be able to spend the day elk hunting.

For 25 hunting districts listed in Appendix H, the total net value of elk hunting amounts to $18.2 million.

The net value of deer hunting (Brooks, 1988b)in these 25 districts amounts to approximately 84 percent of the value of elk hunting, or $14.9 million. Together, the net value of elk and deer hunting in these districts totals approximately $33.1 million.

Actual expenditures made by elk hunters in hunting district 839 was $521,484, and for deer hunters, actual expenditures were approximately $380,600. Actual expenditures made by elk and deer hunters in all 25 of these districts amounts to approximately $14.7 million and $10.8 million, respectively.

Wildlife do move between hunting districts, and seasonal home ranges overlap adjacent districts as shown in Maps 5 and 6. therefore, disease, parasites and/or genetic pollution could spread throughout wildlife populations very quickly. The 25 hunting districts surrounding the Helena area were used to estimate the population that may be affected, based on known movements of radio-marked elk. The elk population estimate (Map 7) is approximately 16,000 for these 25 districts, however progressive contact is known to occur beyond these districts.

If native elk and deer populations were to contract disease, hunters would be discouraged from participating in the sport; or if the numbers of wildlife were reduced as a result of control actions to remove hybridized or diseased animals, these revenues to the community would be negatively affected and hunter opportunity greatly reduced.

No Action: No impacts.

13. CULTURAL/HISTORICAL RESOURCES

Will the proposed action result in:

a. Destruction or alteration of any site, structure or object of prehistoric, historic, or paleontological importance?

Proposed Action: Unknown. There has been no survey completed for historic features of the proposed site. There exists potential for significant impacts because the entire area has been identified as important in prehistoric, pre-contact and historic resources. In the course of a major archeological project in 1992 (Rennie and Ferguson, 1992) extensive prehistoric occupation and use was recognized and demonstrated in an area defined as the Missouri River Corridor which includes the proposed game farm site. Early journals note the presence of a north-south route, the Old North Trail, that apparently was used for many hundreds of years,and was built and maintained by early peoples. Local belief has it that a portion of the Old North Trail runs through the applicant's property, possibly through the proposed site. This belief is shared by both local residents and cultural resource professionals (pers. com., Dave Schwab, former state archeologist). The Mullan Trail, a major east-west travel and trade route joins the Hilger Valley approximately five miles northwest of the proposed site.

In his journey from the mouth of the Dearborn River to the Helena Valley in 1805, William Clark noted and used the Old North trail. Beartooth Mountain is noted along with the other natural resources of the Gate of the Mountains in the Journals of Lewis and Clark (Biddle, 1962). Accounts written by the sons of French explorer Chevilaier Vendrye who passed through the area in 1742 also make note of Beartooth Mountain. Many of the landowners adjacent to the proposed site have worked with archaeologists in documenting artifacts found on their property which date from prehistoric to the late 1800's. Historians and archaeologists who have knowledge of the proposed site believe it to have high potential for important prehistoric and historic cultural resources. Eleven recorded archeological sites are located within the Township 13N.

Alternative action: The State Historic Preservation Office (Appendix J) notes that the lack of known sites in the two sections in which the proposed facility is located may be due to the lack of any previous survey work rather than the lack of sites. SHPO notes that the proposal calls for ground disturbance and surface disruption from concentrated animal use. SHPO believes that a surface inventory for cultural resources may be warranted. In light of the location and proximity to other cultural sites in the Missouri River Corridor, survey and mitigation activities are appropriate. Such an inventory could forestall the destruction or disturbance of any significant archeological or historic sites which may be within the proposed facility site.

No Action Alternative: No impact.

b. Physical change that would affect unique cultural or historic values?

Proposed Action: Unknown impacts. Because the sight is part of known pre and historic cultural resource areas but has not been site-surveyed the extent of those resources are unknown. However, because the proposed facility will concentrate animal use in a relatively small area and construct roads throughout the site, physical surface changes can be expected which could affect resources present.

No Action Alternative: No impact.

c. Effects on existing religious or sacred uses of a site or area?

Proposed Action: Unknown impacts. In light of prehistoric and historic use of the area by native peoples, the potential for impacts does exist. However, specific information concerning current or traditional Native sacred sites which may be impacted by this proposal was unavailable at the time of this writing.

No Action Alternative: No impact.

SIGNIFICANCE CRITERIA

1. SUMMARY EVALUATION OF SIGNIFICANCE

a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may resul in impacts on two or more separate resources which create a significant effect when considered together or i total.)

Proposed Action: Potentially significant impacts. Wildlife, soils, water, disease establishment and spread, publi safety, cultural resources and land use, individually of concern, have the potential for significant cumulative impact. A no action alternative would avoid these impacts. Mitigation of impacts to wildlife, soil, water an risks posed to human health and safety are unknown at this time.

No Action Alternative: No impact.

b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?

Proposed Action: Potentially significant impacts. Individually and cumulatively, disease, hybridization of native species, and safety are potentially significant impacts. Efforts to monitor disease and prevent the introduction of disease to the game farm, test and eliminate the importation of hybrid elk, and provide the capability t isolate all game farm animals from contact with wild game animals are potential mitigating methods which may or may not reduce impacts to acceptable level. The ability to maintain fences at this location may provide insurmountable problems due the severe slope and soil conditions.

No Action Alternative: No impact.

c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?

Proposed Action: Unknown. The Montana Department of Health and Environmental Sciences, Water Quality Bureau has authority to regulate potential discharges to waters of the state. A determination of the need fo a discharge permit must be made prior to the issuance of a game farm license. This has not been provided t the department at this time, although after providing DHES staff with information obtained after the 9/12/94 site visit, preliminary indications are that a permit may be required. The Department of Livestock has the authority to approve quarantine facilities for game farm operations. Approval of quarantine facilities is a condition of issuing a license and the proposed quarantine facility is still considered inadequate and has not been approved at this time.
FWP is not aware of any other laws or regulations that apply to game farms or would conflict with the operation of a game farm.

No Action Alternative: No impact.

d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?

Proposed Action: Unknown. The establishment of this facility would be in an environmentally and aesthetically sensitive area.

No Action Alternative: No impact.

e. Generate substantial debate or controversy about the nature of the impacts that would be created?

Proposed Action: Potentially significant impacts. The proposal has generated substantial debate and controversy as well as raised issues related to game farms in general. Many people who attended the public scoping meeting on September 15, 1994 came with the expectation of being able to offer comment and gain specific information about the proposal. This level of participation indicated significant public interest and opinion on the proposal. Of 45 comments received, 31 chose to voice opposition to the licensing of the facility.

No Action Alternative: No impact.

2. ALTERNATIVES ANALYSIS

Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

Proposed Action: License the game farm as proposed by the applicant. The facility proposed by the applicant has potentially significant impacts. Many of these impacts cannot be mitigated without substantial alterations to the proposal and some of the impacts cannot be mitigated.

Alternative Action: License the proposed game farm with stipulations. While it is appropriate to consider and discuss alternatives to the proposed action, it is unknown whether the following mitigation measures will be effective or adequate. These measures have not been tested and shown to be effective elsewhere. Considering conventional techniques utilized on other sites, and the sensitivity and circumstances of the proposed site, the following mitigation measures would be imposed:

1. Conventional game farm fencing, involving a single 8 foot fence, will not be adequate on the proposed site to keep wildlife and game farm animals from making contact. Fences constructed 12 feet high, with either mesh or high-tensile wire are proposed but may not be adequate. Double fences with at least 10 feet between the internal and external structures around the perimeter of the game farm compound may be necessary. This measure may not be adequate and it may also pose a threat of physical injury to animals attempting to jump the fence if the space between the fences proves to be inadequate. Clearance of potential hazards to fence integrity such as trees from 50 to 100 feet from the outside perimeter will be necessary to additionally ensure against breached enclosures. This will contribute significantly to the impact on the physical environment.

The fences should be construction with a combination of wooden, concrete and metal fence posts as proposed by the applicant to reduce fence breaching from various sources such as fire (wooden posts) and pressure loading as in the case of drifting snow and sparring elk (metal posts bend with weight). Corners should be reinforced and the wire/mesh should properly be stretched so as to insure maximum strength. One or both fences should be topped with a rail.

2. In order to negate the possibility of gates being left open which could cause ingress and egress problems, no additional gates may be located on the exterior perimeters of either of the fences. Gates shall be placed only at points where animal handling and transportation areas will be established.

3. The quarantine and feeding enclosures must be moved to a distance of no less than 100 feet from the creek or other surface water sources to reduce the risk of pathogen contamination of the water or degradation of water quality.

4. Containment of pathogens:

a. Substances such as manure, waste feed, animal by-products from calving, slaughtering, velveting, and dead animals must be collected and removed from the site to an approved disposal location that is not available to big game animals, domestic livestock or humans. By so doing, the potential for these substances to contribute to water quality degradation or disease transmission may be reduced.

b. Feed bunks and watering troughs should be elevated above the ground to reduce the potential initiation and transmission of disease,

c. The entire enclosure must have erosion and runoff control structures built to standards which would effectively control water and operation effluents and ensure against the spread of pathogens into any water source. An erosion control plan shall be designed for the entire facility in cooperation with the county Conservation District. To ensure that the plan adequately addresses the control of pathogens on the facility, the Department of Livestock must also have input and approval of the plan.

5. Game farm pens must be located to avoid all water sources (except game farm stock drinking water facilities). Fences must be placed away from Beartooth Creek and any other drainage with intermittent or continual free-flowing water. The pens may not incorporate the fish ponds which are under development.

6. Best management practices for water quality maintenance must be applied and maintained.

7. DNA and disease testing of any new game farm animal that arrives on site is mandatory, recognizing that both genetic and disease testing procedures have significant limitations and shortcomings. Game farm animals harvested or leaving the facility should be tested for disease and parasites before leaving the site.

8. A contingency plan to recapture escaped animals must be prepared by the applicant in cooperation with MDFWP, recognizing that due to the very steep terrain and heavy timber, capture of farm animals may not be possible. This plan shall include time frames, actions, options and financial responsibility..

9. Currently, the names for both the applicant's Georgia and Montana operations is Sleeping Giant Elk Ranches. To eliminate confusion and alleviate the possibility of record-keeping problems and errors, one of these facilities must be re-named and the documentation for any elk on the properties adjusted to reflect the change. Documentation of these changes to game farm stock must be verified by Montana Department of Livestock brand inspectors.

10. A complete weed management plan must be drafted and filed with the county weed district.

11. Random and frequent aerial and ground monitoring by MDFWP wildlife and enforcement personnel (as many as 12 per year) to detect ingress or egress and to assess the status of the game farm animal population and assure security , adequate maintenance and integrity of the facility.

These mitigation measures will not guarantee that potentially significant impacts do not occur.

3. STATUTES AND RULES ANALYSIS

Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

MONTANA CODES ANNOTATED:

1. Unscheduled inspections	87-4-413
2. Informing DoL and MDFWP of sale or transport of animals	87-4-415
3. Sale of game parts, meats, and byproducts	87-4-416
4. Restrictions on importations of certain species	87-4-424
5. Escape from game farm	87-4-419
6. Criteria for issuance of license - fencing and enclosure requirements	87-4-406

ADMINISTRATIVE RULES OF MONTANA

1. Fencing requirements	12.6.1503A
2 Game Farm Reporting	12.6.1504A
3. Cloven-hoofed animals as game farm animals	12.6.1506
4. Holding and handling facilities	12.6.1509

5. Quarantine areas required 12.6.1510

6. Licensing limitations (expansion and public review) 12.6.1511

7. Game Farm animal identification: cloven-hoofed ungulates 12.6.1513

8. Transportation 12.6.1514

9. Importation 12.6.1515

10. Duty to report Contagious Diseases 12.6.1516

11. Escaped Game Farm animals 12.6.1517

12. Confiscation procedures 12.6.1518

13. Waiver 12.6.1519

PART III. NARRATIVE EVALUATION AND COMMENT

Narrative evaluations and comments are contained within the body of Section II (Environmental Review).

PART IV. CONCLUSION

1. Based on the significance criteria evaluated in the EA, is an EIS required? If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

Based on the environmental assessment which documents potentially significant impacts to wildlife, land, water quality, neighboring agricultural operations, animal and human health, significant natural and historic resources in the area, an EIS will be required for this proposal. The department concludes that it is not possible to mitigate all of the potentially significant impacts, therefore an EIS is required pursuant to ARM 12.2.432.

No Action Alternative: Deny the proposal. The application as proposed would be denied based on the potentially significant environmental, health and wildlife impacts raised in this document which cannot be mitigated. This action would implement the no action alternative as discussed throughout the document.

2. Describe the level of public involvement for this project if any and, given the complexity and seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?

A scoping meeting was held and attended by 33 people on September 15, 1994 at Fish, Wildlife and Parks Headquarters, 1420 East 6th Ave., Helena. The purpose of this meeting was to share with the public some of the issues that the internal EA preparation team had identified and solicit public comment on developing additional issues or concerns. Written comments were received at the meeting and from the period beginning September 7, 1994 to September 16, 1994. Because the licensing process timeline had been significantly reduced due to time involved in the previous denial of a license and subsequent reversal of the proposed decision, only 65 of the statutory 120 days remained for the review period. Due to these constraints it was only possible to allow a fourteen (14) day public response period rather than the usual thirty days. Time constraints further made it impossible to host a public meeting to solicit further public responses and discuss the EA.

3. Duration of comment period for the Environmental Assessment:

Comment period will be 14 days starting September 26, 1994 and ending September 10, 1994.

4. Name, title, address and phone number of the person(s) responsible for preparing the EA:

Michael Korn, Landowner-Sportsman Coordinator, 1420 E. 6th Ave., Helena, MT 59620, 444-2602.
Gayle Joslin, Region 3 Biologist, 1408 8th Ave., Helena, MT., 59620, 444-4720.
Karen Zackheim, Game Farm Program Officer, 1420 E. 6th Ave., Helena, MT., 59620, 444-2602.
Wayne Phillips, Staff Attorney, MDFWP 1420 E.6th Ave., Helena, MT., 59620, 444-4594.
Michael T. Ottman, Warden Sergeant, 1408 8th. Ave., Helena, MT., 59620, 444-4720

LITERATURE CITED

Beatson, N.S. 1985. Tuberculosis in red deer in New Zealand. Pp: 147-150 *in* Biology of Deer Production. The Royal Society of New Zealand, Bulletin 22.

Biddle, Nicholas, ed. 1962. The Journals of the Expedition Under the Command of Capts. Lewis and Clark. The Heritage Press, New York.

Beer, Margaret. 1994. Montana Natural Heritage Program - Species of Special Concern: Sperry Ranch Area. Correspondence dated September 8, 1994.

Brooks, Rob. 1988. The net economic value of elk hunting in Montana. Montana DFWP. 53 pp.

Carlson, T. 1993. Summary of elk management in the Elkhorn Mountains from 1982 through 1992. Montana Dept. of Fish, Wildlfie & Parks. 15 pp.

Chadwick, D.H. 1973. Mountain goat ecology-logging relationships in the Bunker Creek drainage of Western Montana. M.S. Thesis. Univ. of Montana, Msla. Proj. No.W-120-R-3,4 Montana Dept. Fish & Game. 262pp.

DeSimone, Rich and John Vore. 1992. Elkhorn Elk Monitoring Program - 1991 Annual Report. Montana Dept. of Fish, Wildlife & Parks. 110 pp.

Fiest, F. and J. Williams. In prep. North Big Belts Elk Monitoring Project. Montana DFWP.

Forbis, Richard. 1950. Arceological Data from the Gates of the Mountains. Anthropology and Sociology Paper #1, Montana State University, Missoula. 10 pp.

Geist, Valeries, 1991. Elk Country. Northword Press Inc., Minoqua, WI 175 pp.

Hamlin, Kenneth. 1991. Elk population dynamics and breeding biology - Gravelly-Snowcrest Mountains - Progress Report. Montana Dept. of Fish, Wildlife & Parks. 29 pp.

Hurley, M.A. 1994. Summer-Fall Ecology of the Blackfoot-Clearwater Elk Herd of Western Montana. M.S. Thesis. Univ. of Idaho. 138 pp.

Ihsle, H.B. 1982. Population ecology of mule deer with emphasis on potential impacts of gas and oil development along the east slope of the Rocky Mountains, northcentral Montana. M.S. Thesis, MSU Bozeman 85 pp.

Joslin, Gayle. 1989. Union Oil/Sieben Ranch Elk Project -- Progress Report. Wildlife Division, Montana DFWP. 42 pp.

Joslin. G.L. 1986. Mountain goat population changes in relation to energy exploration along Montana's Rocky

Mountain Front. Pp. 253-271 *In:* Proc. Fifth Bienn. Symp. North. Wild Sheep and Goat Council.

Joslin, Gayle. 1991. Granite Butte Elk GIS Project Progress Report -- Maintenance of elk habitat -- Recovery of public hunting opportunity. Montana Dept. of Fish, Wildlife & Parks in cooperation with the Rocky Mountain Elk Foundation, Bureau of Land Management, Helena National Forest, Seven-Up Pete Joint Venture. 67 pp.

Kahn, Rick. August 1991. Game farming seminar. Helena, MT

Kahn, Rick. 1992. Ingress and egress from game farms in Colorado. Colorado Division of Wildlife. 4 pp.

Little, T.W.A., C. Swan, H.V. Thompson, and J.W. Wilesmith. 1982. *Mycobacterium bovis* infection in cattle, badgers and other mammals in an area of Dorset. Vet. Rec.: 318-320.

McKelvey P.D. and F.G. Fiest. 1985. Management Plan for Beartooth WMA. Montana DFWP. 30 pp.

Montana Department of Fish, Wildlife & Parks, 1992. Summary of background information pertaining to regulation of the game farm industry. Prepared by Heidi Youmans. 24 pp.

Pac, D.F., R.J. Mackie, H.E. Jorgensen. 1991. Mule deer population organization, behavior and dynamics in a northern Rocky Mountain environment. Montana Dept. Fish, Wildlife & Parks. 316 pp.

Rau, L. 1991. Bighorn Sheep Habitat Management Plan. U.S.D.I BLM, Butte District Office. 28 pp.

Rennie, Patrick and Ferguson, David. 1992. Missouri River Corridor Project: Prehistoric Cultural Resources Inventory; Lewis and Clark County, Montana. Lewis and Clark Historic Preservation Commission, Lewis and Clark County Planning Dept. and Montana State Hist. Preservation Office, Montana Historical Society. 136 pg.

Rixford, B. 1990. Sleeping Giant and Sheep Creek Wilderness Study/Environmental Impact Statement. U.S.D.I Bureau of Land Management, Butte District Office. 129 pp.

Spence, L.E. 1975. Upper Blackfoot River Study - A Premining Inventory of Aquatic and Wildlife Resources. Montana Department of Fish and Game Environment and Information Division in cooperation with The Anaconda Company. 86 pp.

Williams, Ted. 1992. The Elk Ranch Boom in Audubon May/June pp: 14 - 20

Youmans, H. March 1992. Summary of Game Farm Workshop, Boise, ID.

Zackheim, K. 1994. Ingress and Egress of animals on Montana on Montana Game Farms. MDFWP

APPENDICIES

INDEX OF APPENDICIES

A. MDFWP Legal Authority to regulate Game Farms.

B. Sleeping Giant Elk Ranch Game Farm License Application Materials.

C Revised Application Received 9/22/94.

D. Soil Data.

E. Summary of Background Information Pertaining to Regulation of the Game Farm Industry.

F. Partial List of Annual Elk Surveys Conducted in Hunting Districts Surrounding the Helena Area.

G. Montana Natural Heritage Program: List of Vertebrate Species.

H. Economics of Elk Hunting Districts Surrounding the Helena Area.

I. Costs of TB Testing at the Elk Valley Game Farm, Hardin, Montana, 1994.

J. State Historic Preservation Office Correspondence.

K. Public Scoping Comments.

APPENDIX A

Part 4
Game Farms

87-4-401 through 87-4-405. Repealed. Sec. 51, Ch. 570, L. 1983.

87-4-406. Definitions. As used in this part, the following definitions apply:

(1) "Department" means the department of fish, wildlife, and parks.

(2) "Facilities" means perimeter fences and other enclosures that provide for the confinement, handling, and quarantine of game farm animals.

(3) "Game animals" means game animals as defined in 87-2-101 that are not the lawful property of any private person.

(4) "Game farm" means the enclosed land area upon which game farm animals may be kept for purposes of obtaining, rearing in captivity, keeping, or selling game farm animals or parts of game farm animals, as authorized under this part.

(5) "Game farm animal" means a privately owned caribou, black bear, mountain lion, white-tailed deer, mule deer, elk, moose, antelope, mountain sheep, or mountain goat indigenous to the state of Montana or any other cloven-hoofed ungulate as classified by the department.

(6) "Person" means an individual, firm, corporation, association, or partnership.

History: En. Sec. 1, Ch. 570, L. 1983; amd. Sec. 3, Ch. 540, L. 1985; amd. Sec. 1, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 inserted definition of facilities; in definition of game farm, in two places before "animals", inserted "farm"; deleted former definition of game farm shooting license that read: ""Game farm shooting license" means the license required under 87-4-421 for a game farm operator to hunt the game farm animals indigenous to the state of Montana on his game farm"; and made minor changes in style. Amendment effective April 12, 1993.

87-4-407. License required — penalty — seizure of illegally possessed animals. (1) A person may not operate a game farm in this state without first obtaining a game farm license from the department.

(2) A person who operates a game farm without a license or possesses, transports, buys, or sells animals whose importation into the state is restricted pursuant to 87-4-424 is guilty of a misdemeanor and is subject to the penalties provided in 87-4-427(4).

(3) Any animal held in violation of subsection (2) or otherwise illegally possessed may be immediately seized by the department and is subject to disposal by the department. Costs of seizure may be charged to the person in possession of the animal.

History: En. Sec. 2, Ch. 570, L. 1983; amd. Sec. 2, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 inserted (2) providing for a misdemeanor penalty; inserted (3) providing for seizure of illegally possessed animals; and made minor changes in style. Amendment effective April 12, 1993.

87-4-408. Department jurisdiction — applicability of livestock laws and rules. (1) The department has primary jurisdiction over game farms.

(2) A game farm licensee must also comply with all applicable laws and rules administered by the department of livestock relating to marking, inspection, transportation, and health.

History: En. Sec. 3, Ch. 570, L. 1983; amd. Sec. 1, Ch. 531, L. 1991.

87-4-409. Application for license — limitations on issuance. (1) A person desiring to obtain a game farm license shall make written application to the department on forms provided by the department. The application shall specify:

(a) the applicant's name;

(b) the applicant's address;

(c) the name and address of the individual who will be the principal manager of the game farm;

(d) the exact legal description of the land upon which the game farm is to be located, together with the nature of the applicant's title to the land, whether in fee, under lease, by contract for deed, or otherwise;

(e) the species of game farm animals proposed to be kept or reared on the game farm;

(f) the type of facilities contemplated and the location of perimeter fencing;

(g) the source from which the applicant intends to acquire the game animals;

(h) if the applicant is not a Montana resident, the name and address of a Montana resident designated by the applicant as the applicant's local agent;

(i) if the applicant is a corporation, the full names and addresses of all stockholders owning more than 10% of the stock in the corporation; and

(j) information demonstrating that the applicant is responsible.

(2) Within 30 days of receipt of an application, the department shall notify the applicant in writing whether the application:

(a) is in compliance and is accepted as complete; or

(b) is not in compliance and shall list any deficiencies that must be corrected before the application is in compliance. The department shall return any noncomplying application to the applicant, who may resubmit the application upon correction of the deficiencies.

(3) Within 120 days of the acceptance of a complete application, the department shall notify the applicant of its proposed decision to approve, approve with stipulations, or deny the application. If the department determines that the preparation of an environmental impact statement is required by Title 75, chapter 1, and by department rules adopted pursuant to the Montana Environmental Policy Act, then the department has an additional 180 days to act on the completed application. If required fencing has not been completed, the department shall approve the application subject to completion and approval of the fencing. If the application is denied or approved with stipulations, the department shall specify the reasons for denial or stipulations.

History: En. Sec. 4, Ch. 570, L. 1983; amd. Sec. 3, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 in (1), at end of first sentence, inserted "on forms provided by the department"; inserted (1)(c) requiring specification of principal manager; in (1)(e), before "animals", inserted "farm"; in (1)(f) substituted "facilities" for "fencing" and after "contemplated" inserted "and the location of perimeter fencing"; substituted (2) regarding notification of application compliance for former language that read: "A game farm license shall be issued only to a responsible applicant who owns or leases the premises on which the operations are to be conducted and who has properly fenced the land upon which the game farm is to be located. The fencing

must be designed and constructed to prevent the escape of the species of game farm animals kept on the land and to prevent the entry of the same species of game animals"; at beginning of first sentence of (3) increased time to 120 days from 60 days, before "application" substituted reference to acceptance of a completed application for reference to receipt of an application, near middle, before "decision", inserted "proposed", and after "approve" inserted "approve with stipulations", inserted second sentence establishing additional review time if an environmental impact statement is required, in third sentence, after "completion", inserted "and approval", and in fourth sentence, after "denied", inserted "or approved with stipulations" and at end, after "denial", inserted "or stipulations"; and made minor changes in style. Amendment effective April 12, 1993.

87-4-410. Removal of game animals. (1) If game animals are present on the land which is to be covered by a game farm license, the license shall be issued but must be conditioned upon the applicant complying with this section.

(2) Before the fence surrounding any such land may be closed, all game animals must to the extent possible be driven therefrom by the applicant, at the applicant's expense and under the direction of a representative of the department.

(3) If at the time the license is issued all game animals cannot be removed from the licensed land, the applicant and a representative of the department shall decide the approximate number of remaining game animals of each indigenous species. This number is the "base number".

(4) The department may remove the base number of game animals from the game farm by trapping them within 120 days from the date the number was determined.

(5) If the department decides not to remove the game animals or if some game animals were not successfully removed by trapping, the public must be granted access to harvest those game animals during a special hunt set for that purpose during the next regularly scheduled hunting season. All administrative costs incurred by the department in arranging the special hunt or providing for hunting on the applicant's land during the regular season must be reimbursed by the applicant.

(6) After compliance with this section, any animals from the base number that remain and their progeny belong to the licensee, and the licensee may deal with them as provided for in this part.

History: En. Sec. 5, Ch. 570, L. 1983.

87-4-411. License and renewal fees — deposit of fees. (1) The department shall charge an initial game farm license fee of $200 and shall charge an annual renewal fee of $50.

(2) The fees must be deposited in the state special revenue fund for the use of the department for purposes of this part.

History: En. Sec. 6, Ch. 570, L. 1983; amd. Sec. 48, Ch. 281, L. 1983; amd. Sec. 5, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 increased initial license fee from $100 to $200 and annual renewal fee from $25 to $50; and made minor changes in style. Amendment effective April 12, 1993.

87-4-412. Term of license — renewal — transferability. (1) A game farm license expires on January 31 of the year succeeding the year of issuance. Application for renewal must be made before a license expires. The depart-

ment shall renew the license upon payment of the renewal fee if the licensee has complied with all recording and reporting requirements.

(2) A game farm license for a specific facility is transferable with the consent of the department. The department's consent must be given if:

(a) the transferee meets the requirements of 87-4-426(1);

(b) the game farm and facilities are in compliance with requirements in place at the time the license was issued;

(c) the game farm is not under quarantine by the department of livestock;

(d) game farm animals to be transferred are not prohibited under this part and department rules; and

(e) the transfer is not proposed as a means to evade a requirement imposed on the licensee.

History: En. Sec. 7, Ch. 570, L. 1983; amd. Sec. 6, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 at end of (1) substituted "complied with all recording and reporting requirements" for "not violated any provisions under which the license was granted"; and substituted (2) regarding transferability of game farm license for former language that read: "A game farm license is nontransferable." Amendment effective April 12, 1993.

87-4-413. Inspection. (1) Upon receipt of an application for a game farm license, the department shall inspect the land proposed to be covered by the license.

(2) After issuance of a game farm license, the department may inspect the game farm or the licensee's game farm books on a scheduled basis or on such other reasonable basis as may be determined necessary.

History: En. Sec. 8, Ch. 570, L. 1983.

87-4-414. Game farm animals as private property — source. (1) All game farm animals lawfully possessed on a licensed game farm are private property for which the licensee is responsible as provided by law.

(2) The licensee may acquire, breed, grow, keep, pursue, capture, harvest, use, sell, or dispose of the game farm animals and their progeny in any quantity and at any time of year as long as the licensee complies with the requirements of this part.

(3) A licensee shall mark each game farm animal in a manner approved by the department of livestock that indicates ownership and provides individual identification of animals for inspection, transportation, reporting, and taxation purposes.

(4) Game farm animals must be lawfully acquired by the licensee.

(5) Except for importation permits and health certificates required under 81-2-703, laws applicable to game animals do not apply to game farm animals raised on a licensed game farm.

History: En. Sec. 9, Ch. 570, L. 1983; amd. Sec. 2, Ch. 531, L. 1991; amd. Sec. 7, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 in (1), after "lawfully", substituted "possessed" for "raised" and at end substituted "for which the licensee is responsible as provided by law" for "of the licensee"; in (2) substituted "harvest" for "kill"; in (3), before "ownership", substituted "indicates" for "facilitates" and after "ownership" inserted "and provides individual"; substituted (4) requiring that animals be lawfully obtained for former language that read: "Before allowing hunting of any game farm animals on a game farm, the game farm licensee must obtain a game farm shooting license from the department"; and

made minor changes in style. Amendment effective April 12, 1993.

87-4-415. Transportation and sale of game farm animals — quarantine. (1) Prior to selling, transferring, transporting, or disposing of one or more game farm animals, the game farm licensee shall contact the department of livestock to request an inspection by a department of livestock stock inspector for all game farm animals except carnivores and omnivores. In the case of carnivores and omnivores, the game farm licensee shall contact the department to request an inspection by a department official. This section applies to all game farm animals, whether alive or dead.

(2) (a) Inspection under subsection (1) must include examination of the game farm animal and all marks, tags, and tattoos to identify ownership prior to issuance of a certificate of inspection.

(b) A certificate of inspection must be made in triplicate and must specify:

(i) the date of inspection;

(ii) the place of origin and destination of the shipment;

(iii) the name and address of the owner of the game farm animals and of the purchaser or transferee;

(iv) the number, species, age, and sex of game farm animals transported or disposed of;

(v) ear tag numbers and tattoos on each animal; and

(vi) any other information that the department of livestock may require.

(c) A copy of the certificate must be:

(i) retained by the inspector;

(ii) furnished by the inspector to the owner or shipper of the game farm animals, to accompany the animals to their destination;

(iii) filed by the inspector with the department of livestock within 5 days of inspection; and

(iv) provided by the department of livestock to the department within 10 days of inspection.

(3) The department of livestock may quarantine any game farm animal pending inspection and health certification. The department shall advise the department of livestock regarding the importation or transportation of any game farm animal that the department reasonably believes may be infected with a disease specific to wildlife.

History: En. Sec. 10, Ch. 570, L. 1983; amd. Sec. 3, Ch. 531, L. 1991; amd. Sec. 8, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 substituted (1) regarding inspection of game farm animals for former language that read: "Whenever the licensee of a licensed game farm sells or disposes of one or more game farm animals, he shall, at the same time, deliver to the recipient or otherwise cause to accompany each game farm animal or animals an invoice or bill of sale signed by the licensee or his agent stating the number of the game farm license, the date of acquisition or disposition, the species, the age, sex, and class of game animals disposed of, and the name and address of the transferee. This invoice or bill of sale, along with any required health certifications, authorizes transportation of the game farm animal or animals being sold, transferred, or disposed of"; and substituted (2) regarding inspection criteria for former language that read: "Within 10 days after movement or sale, the licensee or his agent shall mail postpaid a duplicate of the invoice or bill of sale to the department of livestock and the department." Amendment effective April 12, 1993.

87-4-416. Sale of game parts, meats, and byproducts. (1) A game farm licensee may sell or otherwise dispose of the carcass, parts, or byproducts of a properly identified game farm animal taken from a game farm in accordance with the provisions of 87-4-415. A copy of the certificate of inspection must be attached to the carcass or container. Upon the attaching of the certificate of inspection, the carcass, parts, or byproducts of the game farm animal may be transported within the state to the transferee named on the certificate of inspection.

(2) The licensee may sell game farm animals for meat upon compliance with all applicable health laws.

History: En. Sec. 11, Ch. 570, L. 1983; amd. Sec. 9, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 in (1), at end of first sentence, substituted "in accordance with the provisions of 87-4-415" for "only upon preparing an invoice or bill of sale and attaching", in second sentence substituted "certificate of inspection" for "it" and at end, after "container", deleted "and keeping a copy for his records", and in third sentence, in two places, substituted "certificate of inspection" for "invoice or bill of sale"; and made minor changes in style. Amendment effective April 12, 1993.

87-4-417. Records and reporting. (1) Each game farm licensee shall keep and maintain for 3 years accurate written records of all purchases, transfers, and sales of game farm animals showing:

(a) the number of each species of game farm animal purchased by the game farm licensee and from whom purchased;

(b) the number of each species of game farm animal transferred or sold, the date of transfer or sale, and the name and address of the person to whom the transfer or sale was made; and

(c) individual identification of each game farm animal purchased, transferred, or sold.

(2) Within 2 weeks after January 1, April 1, and September 1 of each year, the game farm licensee shall file a report with the director, showing the number and species of game farm animals on hand as of January 1, April 1, and September 1 and the number and species of game farm animals bought, sold, or propagated during the reporting period.

History: En. Sec. 12, Ch. 570, L. 1983; amd. Sec. 4, Ch. 531, L. 1991; amd. Sec. 10, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 at beginning of (2) substituted "Within 2 weeks after January 1, April 1, and September 1" for "On or before January 31", near middle, after "January 1", inserted "April 1, and September 1", near end, after "sold", inserted "or propagated", and at end substituted "reporting period" for "past year"; and made minor changes in style. Amendment effective April 12, 1993.

87-4-418. Unlawful capture. No person may capture, take, or otherwise acquire any game animal in this state for use on a game farm except as provided in 87-4-410.

History: En. Sec. 13, Ch. 570, L. 1983.

87-4-419. Escape from game farm — effect. If a game farm animal escapes from a game farm, the game farm licensee shall immediately notify the department of its escape and shall make every reasonable effort to recapture it. If the escaped animal cannot be recaptured within a reasonable time, it becomes the property of the state.

History: En. Sec. 14, Ch. 570, L. 1983.

87-4-420. Taxation. All game farm animals raised on a game farm may be assessed as personal property of the owner.

History: En. Sec. 15, Ch. 570, L. 1983.

87-4-421. Repealed. Sec. 16, Ch. 315, L. 1993.

History: En. Sec. 16, Ch. 570, L. 1983.

87-4-422. Rulemaking. (1) The department may adopt and enforce rules that are necessary to implement the provisions of this part and to coordinate regulation of game farms with the department of livestock.

(2) The rules may address but are not limited to the classifying of cloven-hoofed ungulates, requirements for facilities, reporting and recordkeeping requirements, transportation and importation, restrictions on importation, identification, sale of animal parts, and the care and maintenance of game farm animals.

History: En. Sec. 17, Ch. 570, L. 1983; amd. Sec. 11, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 at end of (1) inserted "and to coordinate regulation of game farms with the department of livestock"; in (2), after "ungulates", substituted "requirements for facilities" for "fencing requirements", after "reporting" inserted "and recordkeeping", after "importation" inserted "restrictions on importation", and at end deleted "and game farm shooting licenses"; and made minor changes in style. Amendment effective April 12, 1993.

87-4-423. Revocation of license — procedure — disposition of animals. (1) Proceedings for the revocation of a license or the discipline of a licensee must be based on a determination by the department, after an investigation, that there is good cause and a sufficient factual basis to believe that the licensee or the principal manager is responsible for one or more of the acts or omissions set out in 87-4-427(1).

(2) The department may initiate revocation or disciplinary proceedings against a licensee by specifying the grounds in writing to the licensee and providing an opportunity for a hearing as provided in 87-4-428.

(3) Upon discovery of a violation of recordkeeping or reporting requirements that is not a material violation or an attempt to deceive, the department shall give notice of the violation to the licensee, with a statement that the violation must be corrected within 30 days of the notice, unless a longer period is approved by the department. Upon failure of the licensee to correct the violation, the department may institute revocation proceedings.

(4) (a) A licensee whose license is revoked shall lawfully dispose of any game farm animal held pursuant to the license. Lawfully acquired and held game farm animals may be disposed of by the licensee within 180 days of the license revocation or within a longer period if specified by the department in the revocation order. After the expiration of this period, the department shall seize and dispose of any game farm animals that have not been lawfully disposed of by the licensee. Any proceeds that remain after deducting the department's expenses revert to the licensee. Any unrecovered costs may be charged to the licensee.

(b) The department, when it is determined to be necessary by the state veterinarian appointed pursuant to 81-1-301, may require that diseased or potentially diseased game farm animals be quarantined or destroyed.

History: En. Sec. 18, Ch. 570, L. 1983; amd. Sec. 5, Ch. 531, L. 1991; amd. Sec. 13, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 substituted (1) regarding revocation proceedings for former language that read: "A game farm license may be revoked for failure to operate the game farm according to the provisions of this part or rules adopted under this part"; inserted (2) concerning initiation of revocation or disciplinary proceedings; near beginning of first sentence of (3), after "violation", inserted "of recordkeeping or reporting requirements that is not a material violation or an attempt to deceive" and inserted second sentence that read: "Upon failure of the licensee to correct the violation, the department may institute revocation proceedings"; deleted former (3) that read: "(3) Upon failure of the licensee to correct the violation, the department may institute revocation proceedings. If the department institutes revocation proceedings, it shall provide reasonable notice and opportunity for a hearing to the licensee. After hearing and upon proof of violation, the department may revoke the game farm license"; and substituted (4) regarding disposal or seizure of game farm animals following license revocation for former language that read: "In addition to the revocation of a license allowed by this section, a person who violates this part or a rule adopted under this part is subject to a fine of not more than $500 or imprisonment in the county jail for not more than 1 year, or both." Amendment effective April 12, 1993.

87-4-424. Department restrictions on importation of certain species. The department or the department of livestock may restrict from importation for purposes of game farming any species or subspecies and their hybrids with native species that are determined through scientific investigation to pose a threat to native wildlife or livestock through nonspecific genetic dilution, habitat degradation or competition caused by feral populations of escaped game farm animals, parasites, or disease.

History: En. Sec. 7, Ch. 531, L. 1991; amd. Sec. 14, Ch. 315, L. 1993.

Compiler's Comments

1993 Amendment: Chapter 315 near end, after "dilution", inserted "habitat degradation or competition caused by feral populations of escaped game farm animals". Amendment effective April 12, 1993.

87-4-425 reserved.

87-4-426. Criteria for issuance of license — fencing and enclosure requirements. (1) A game farm license may be issued by the department only to an applicant:

(a) who owns or leases the premises on which the operations are to be conducted;

(b) who has not been or whose principal manager has not been convicted of or who has not forfeited bond of $100 or more for more than one violation of the fish and game laws or applicable regulations of any state or the United States within a 5-year period prior to application;

(c) who has not or whose principal manager has not at any time pleaded guilty to or been convicted of a felony, unless civil rights have been restored pursuant to law. A person may not apply for licensure during any time in which a deferred or suspended felony sentence is in effect.

(d) who is or whose principal manager is at least 18 years of age.

(2) A game farm license must be issued by the department if:

(a) the applicant has properly fenced the perimeter of the land upon which the game farm is to be located with fencing designed and constructed to prevent the escape of the species of game farm animal kept on the game farm and to prevent the entry of the same species of game animal or other native

game animal species capable of interbreeding with or contracting diseases or parasites from game farm animals;

(b) the application is for a single location;

(c) it is demonstrated that the applicant or the applicant's principal manager has the necessary skills to properly care for game farm animals or intends to employ a person who has those necessary skills; and

(d) the application has not been denied under this section or issued with stipulations under subsection (3).

(3) An application for a game farm license may be denied in its entirety or issued with stipulations if necessary to prevent public safety hazards or significant negative impacts to Montana's wildlife resources. Denial of an application or stipulations attached to a game farm license must be based on one or more of the following potential impacts ascribed to the physical location of the proposed game farm:

(a) substantial loss or destruction of critical seasonal game animal habitat or habitat of federally designated threatened or endangered species under the Endangered Species Act of 1973, 16 U.S.C. 1531, et seq., including but not limited to traditional breeding, birthing, rearing, and wintering areas;

(b) blockage or disruption of major traditional seasonal migration corridors or major travel routes;

(c) unacceptable threat of introduction or transmission of serious diseases or parasites to native wildlife populations, as determined by the state veterinarian appointed pursuant to 81-1-301;

(d) unacceptable threat of escape of captive game farm animals and establishment of feral populations that would result in habitat damage or competition with or genetic pollution of native wildlife populations;

(e) the creation of a significant threat to the safety of the general public and surrounding landowners by the shooting of game farm animals.

(4) If the department determines that it will propose, within the time allowed under 87-4-409(3), to deny a game farm license or issue a license with stipulations, the applicant must be given an opportunity to make changes to the application within 30 days of receipt of the department's determination in order to mitigate or correct any problems or deficiencies. The department shall reconsider the application with the proposed changes within 30 days of receipt of changes to the application before granting, proposing to deny, or proposing to issue the license with stipulations.

(5) An applicant may request that the commission review a department proposal to deny a game farm license or to issue a license with stipulations by petitioning the commission for review within 10 days of the department's proposed decision. The commission shall decide whether to grant the license, propose to deny the license, or issue the license with stipulations. The commission's decision then becomes the department's proposed decision, subject to an opportunity for hearing under 87-4-428.

History: En. Sec. 4, Ch. 315, L. 1993.

Compiler's Comments

Effective Date: Section 18, Ch. 315, L. 1993, provided: "[This act] is effective on passage and approval." Approved April 12, 1993.

87-4-427. Revocation of license — criteria — penalties. (1) The department may revoke any game farm license or impose any of the penalties or conditions specified in subsection (3) if the licensee or the principal manager has committed or is responsible for any of the following acts or omissions:

(a) failure to operate a game farm according to the provisions of this part, rules adopted under this part, or stipulations of the game farm license;

(b) making a materially false statement in the license application;

(c) having pleaded guilty to or been convicted of a felony, including a case in which the sentence is suspended or imposition of the sentence is deferred, unless civil rights have been restored pursuant to law;

(d) two convictions or bond forfeitures of $100 or more for violations of the fish and game laws or applicable regulations of any state or the United States within the preceding 5 years;

(e) negligent or willful misconduct of the game farm operation, including but not limited to the unauthorized egress and ingress of game animal species or game farm animals that:

(i) threatens public safety;

(ii) endangers native game animal populations or habitat through the establishment of feral populations, genetic pollution, or competition for forage or habitat; or

(iii) increases the risk of transmission of disease to native wildlife and the game farm animals of others;

(f) a material and willful falsification of any required game farm records or reports;

(g) the purposeful capture of wild animals within the perimeter fence of a game farm;

(h) repeated failure to maintain or repair required fences or facilities; or

(i) any other willful conduct or omission that creates a substantial threat to other game farm animals and operators or to native wildlife or habitat.

(2) If misconduct under subsection (1)(e) is negligent, the licensee must be given notice and 30 days to correct the misconduct and any adverse impacts of the misconduct. Negligent misconduct may be grounds for license revocation only if the misconduct is not corrected after the initial notice or if the misconduct is repeated.

(3) If the department finds, after opportunity for a hearing required under 87-4-428, that a game farm licensee or the principal manager is responsible for any act or omission set out in subsection (1), the department may in its discretion impose any one or more of the following penalties upon the licensee:

(a) revocation of the game farm license for up to 5 years;

(b) imposition of a civil penalty not to exceed $5,000, restoration of any damage to native wildlife, or both;

(c) deferral of the revocation of a license subject to the completion of or adherence to specified conditions; or

(d) reprimand of a licensee.

(4) In addition to the revocation of a license or other penalties allowed by this section, a person who purposely or knowingly violates this part or a rule adopted pursuant to this part is subject to criminal prosecution and a fine of not more than $1,000, imprisonment in the county jail for not more than 1

year, or both. Any violation of 87-3-118 is subject to prosecution and penalties under that section.

History: En. Sec. 12, Ch. 315, L. 1993.

Compiler's Comments

Effective Date: Section 18, Ch. 315, L. 1993, provided: "[This act] is effective on passage and approval." Approved April 12, 1993.

87-4-428. Right to administrative hearing. (1) An applicant must be given notice and an opportunity for a hearing on a proposed denial or issuance with stipulations of a game farm license pursuant to 87-4-426 before the department may deny a license or grant a license with stipulations.

(2) A licensee must be given notice and an opportunity for a hearing before the department may refuse to renew a license, withhold consent to the transfer of a license, revoke a license, or discipline a licensee.

(3) The notice and an opportunity for a hearing and any judicial appeal must be conducted as provided in Title 2, chapter 4, parts 6 and 7.

History: En. Sec. 15, Ch. 315, L. 1993.

Compiler's Comments

Effective Date: Section 18, Ch. 315, L. 1993, provided: "[This act] is effective on passage and approval." Approved April 12, 1993.

12.6.1506 CLOVEN-HOOFED ANIMALS AS GAME FARM ANIMALS

(1) All animals of the order Artiodactyla, except the families suidae, camelidae, and hippopotamidae, are game farm animals under the definition described in section 87-4-406(4), MCA, provided that the following animals in the families suidae and bovidae are not considered game farm animals under section 87-4-406(4), MCA: domestic pigs, domestic cows and yaks, domestic sheep, domestic goats which are not naturally occurring in the wild in its country of origin, and bison. (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; AMD, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1507 DEFINITIONS (1) "Bill of sale/transportation" is a form utilized by brand inspectors of the department of livestock to document sale and movement of game farm animals.

(2) "Conventional fence" is the woven or welded wire fence used to enclose game farm animals.

(3) "Disease, communicable" means a disease that can spread from one animal to another or to humans.

(4) "Disease, dangerous" means a disease that can cause catastrophic animal loss or risk to human health.

(5) "Domestic" means those populations of animals which through long association with humans have been selectively bred to a degree that has resulted in genetic changes affecting the coloration, temperament, conformation or other attributes of the species to an extent that makes them unique and distinguishable from wild individuals of their species.

(6) "Game farm" means the enclosed land area upon which game farm animals may be kept. 87-4-406 (3), MCA.

(7) "Handling facility" means an enclosure that includes an animal restraining device (such as a squeeze chute) to facilitate inspection and handling of individual game farm animals.

(8) "High tensile fence" means a fence eight feet above ground composed of wire capable of maximum stretching.

(9) "Holding facility" means a fenced enclosure (used in conjunction with the handling facility) to hold game farm animals for individual inspection, marking or treatment.

(10) "Hybrid" means an animal produced from a mating between two animals of different species or subspecies.

(11) "Immediate" means without delay.

(12) "Mingling" means mixing game farm animals together with other animals.

(13) "Quarantine area" means an approved enclosure (separate from the holding and handling facilities) used to isolate newly acquired or diseased game farm animals.

(14) "Prohibited game farm animals" means animals that are prohibited from importation for purposes of game farming pursuant to section 87-4-424, MCA.

(15) "Restricted game farm animals" means animal species subject to specific importation restrictions. (History: Secs. 81-1-102, 81-3-202, 87-4-422 MCA; IMP, Secs. 81-3-210, 81-2-102, 87-4-415, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1508 GAME FARM DESCRIPTION (1) A game farm operator must provide a scaled drawing or map of the proposed exterior boundary, holding and handling facilities, location of quarantine area, and proposed location of all gates, at the time of application for a game farm license. (History: Sec. 87-4-422, MCA; IMP, Sec. 87-4-409 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1509 HOLDING AND HANDLING FACILITIES (1) All game farm operators must have holding and handling facilities that enable handling, marking and individual identification of all game farm animals on the premises. A permanent or portable handling facility must be on the game farm at all times. (History: Secs. 87-4-422, 81-1-102, 81-3-202 MCA; IMP, Sec. 87-4-406, 87-4-409, 81-3-203 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1510 QUARANTINE AREA (1) Every game farm must have an approved quarantine facility within its exterior boundary or submit an action plan to the department of livestock that guarantees access to an approved quarantine facility within the state of Montana.

(a) An approved quarantine facility is one that meets criteria set by the state veterinarian of the department of livestock.

(b) The quarantine area must meet the tests of isolation, separate feed and water, escape security, and allowances for the humane holding and care of its occupants for extended periods of time.

(2) Should the imposition of a quarantine become necessary, the game farm owner must provide an on-site quarantine facility or make arrangements at his or her own expense to transport the animals to the approved quarantine facility named in the quarantine action plan. (History: Sec. 81-2-103 MCA; IMP, Sec. 81-2-102 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

(i) of material of sufficient strength to keep game farm animals securely contained and wild animals from entering;

(ii) extended at least 8 feet above ground level;

(iii) spaced no more than 24 feet apart with stays or supports at 8 foot intervals between the posts;

(iv) braced with wood or with suitable metal material properly set in concrete, at all corners.

(2) Game farm perimeter fences in place as of May 15, 1992 that comply with the previously existing 7 1/2 foot height requirement and have been found to be adequate are not subject to the requirements of this rule (1)(a) through (f).

(a) If fences do not comply with the previously existing 7 1/2 foot height requirement or when reconstruction or replacement of existing 7 1/2 perimeter fences becomes necessary, they shall be constructed to meet the fencing standards outlined in (1).

(3) All open topped enclosures holding game farm carnivores must meet the following requirements:

(a) a perimeter fence at least 8 feet in height constructed of at least 9 gauge woven wire chain link or solid material that cannot be destroyed by the species contained therein;

(b) the perimeter barrier must be supported by a post or a stay at 10 foot intervals;

(c) an overhang of barbed wire or electric wire installed at the top of the perimeter fence or other configuration that precludes escape;

(d) buried mesh wire (minimum 11 gauge) extending laterally 3 feet to the inside of the enclosure for the length of the perimeter fence (to prevent carnivores from digging under the fence and escaping);

(e) any trees or obstacles that would allow carnivores to exit or enter the enclosure must be removed.

(4) All cages holding game farm carnivores must be of sufficient size (height, length and width) to prevent overcrowding and allow exercise and must meet the following requirements:

(a) a cage top constructed of at least 11 gauge woven wire or chain link;

(b) a floor made of cement or concrete at least 3 inches thick into which metal fence posts are permanently secured or a floor that consists of chain link or similar material that will preclude the animal digging through the floor to escape.

(5) Gates on carnivore enclosures and cages must be self-closing and have double locks.

(6) Gates are prohibited in fences that are shared in common by neighboring game farms.

(7) The fence must be maintained in a game-proof condition at all times to prevent animals from escaping from or entering the game farm premises. If game farm animals or wild animals do pass through, under, or over the fence for any reason, the licensee must supplement the fence to prevent continued passage. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-409, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1504 REPORTING (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1504A GAME FARM REPORTING (1) Reports must be recorded on the forms provided by the department of fish, wildlife, and parks and must be filled out completely and accurately.

(2) No pages in the game farm record book may be discarded. Voided pages must be sent to the department of fish, wildlife, and parks (Helena office).

(3) The annual game farm report must be submitted to the department of fish, wildlife, and parks (Helena office) by January 31.

(4) Renewal of a game farm license is contingent upon timely and accurate completion and submittal of required reports.

(5) Game farm record books and reports must be kept on the premises of the licensed game farm, residence of the game farm operator or manager or his/her principal place of business, so long as that location is within the state of Montana. The designated location of the game farm record books and reports must be declared to the department of fish, wildlife, and parks (Helena office).

(6) Purchases, sales, escapes, recaptures, deaths and births must be reported in the game farm record book provided by the department of fish, wildlife, and parks.

(7) Game farm operators are requested to notify the department of fish, wildlife, and parks (regional warden captain), in advance of his/her annual animal census. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-417, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1505 RECOVERY OF ESCAPED ANIMALS (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1511 LICENSING LIMITATION (1) Expansion of existing game farm facilities (construction of buildings or new pastures) outside the confines of a currently approved perimeter fence must be approved by the department of fish, wildlife, and parks prior to use for any game farm activity.

(2) Game farm license applications or expansions are subject to public notification and a public comment process prior to a decision on the application. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-409, 87-4-424 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1512 NEW SPECIES (1) To add a new game farm animal species to an existing game farm, the licensee must submit a new application listing the species desired. The new species may not be acquired or possessed until the department approves the new application, and inspects and approves the facility for occupancy by the new species.

(2) The game farm licensee must obtain, purchase, board, or lease game farm animals from properly licensed or legal sources. (History: Sec. 87-4-422, MCA; IMP, Sec. 87-4-409 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1513 GAME FARM ANIMAL IDENTIFICATION: CLOVEN HOOFED UNGULATES (1) Game farm animals owned by or transferred to any game farm within the state of Montana must be individually identified by the method prescribed by the department of fish, wildlife, and parks and the department of livestock.

(2) Every game farm animal must be marked with a tattoo registered to the game farm licensee (original owner) by the department of livestock. The tattoo must be placed on the left ear of the animal.

(3) Every game farm animal must in addition be marked with an ear tag issued by the department of fish, wildlife, and parks. Ear tags must be placed in a location specified by the department of fish, wildlife, and parks.

(4) Tags or identification numbers must be requested from the department of fish, wildlife, and parks, enforcement division, Helena 444-2452, during business hours. Licensee must state the number and sex of animals to be marked. A department of fish, wildlife and parks representative will deliver the tags/identification to the game farm operator.

(5) Game farms that maintain animals for the primary purpose of photography or filming have the option of using another form of individual identification as an alternative to the designated ear tag. The proposed manner in which such animals will be individually identified must be submitted by the owner to the department of fish, wildlife, and parks for approval.

(6) When loss of an animal identification tag is discovered, the licensee must notify the department of fish, wildlife, and parks immediately. The animal must be re-tagged with approved identification as soon as possible; but in no case later than January 31 of the year following the loss.

(7) Identification assigned to an individual game farm animal may not be transferred to any other animal.

(8) Any individual identification marker issued by the department of fish, wildlife, and parks that is found to have become detached from the animal for which it was issued must be returned to the department of fish, wildlife, and parks (Helena office) immediately.

(9) All newborn game farm animals must be individually marked by October 1 or prior to removal of the animal from the game farm premises, whichever is earlier.

(a) Carnivores must be identified with the proper tattooing method as required by 87-1-231, MCA, ARM Rules 12.6.1901 et seq. Tattoo numbers must be requested from the department, enforcement division, Helena, 444-2452, during business hours.

(10) Game farm animals acquired from another state/province must be marked with a Montana ear tag within 30 days of importation. (History: Secs. 81-3-202, 87-4-422 MCA; IMP, Secs. 81-3-203, 87-4-414, 87-4-415, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1514 TRANSPORTATION (1) Game farm licensee must verbally notify the department of livestock prior to import, transport, transfer or disposal of any game farm animal.

(2) The third copy (to purchaser or transferee) of the bill of sale/transportation must accompany the import, transport, transfer or disposal of game farm animals (both live and dead).

(3) Game farm animals may be transported from out of state through Montana if:

(a) animals proceed directly through Montana with no intent to unload;

(b) an official health certificate is obtained from the state of origin to show destination, origin, and proof of ownership of any game farm animals being transported;

(c) animals are not sold, bartered, traded, or otherwise transferred while in the state. (Transfer does not include moving animals to another transport vehicle);

(d) in emergencies, game farm animals in transit are unloaded and temporarily held with prior approval and in compliance with quarantine rules promulgated by the department of fish, wildlife, and parks and the department of livestock.

(c) third copy to purchaser or transferee, which must also accompany the animals to their destination; and

(d) fourth copy retained by the game farm operator at origin.

(3) The licensee must account for all bill of sale/transportation receipts.

(4) Transactions must be recorded in the record book(s) of the affected game farm licensee(s) within five days of the transaction. (History: Secs. 81-3-202, 87-4-422 MCA; IMP, Secs. 87-4-415, 81-3-210, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1503 FENCING REQUIREMENTS (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1503A FENCING REQUIREMENTS (1) After May 15, 1992, applicants for a game farm license must comply with the following fencing standards:

(a) Conventional perimeter fences must be, at a minimum, eight feet above ground level for their entire length. The bottom six feet must be mesh of sufficient size to prevent wild animals from entering and game farm animals from escaping. Supplemental wire required to attain a height of 8 feet may be smooth, barbed, or woven wire (at least 12 1/2 gauge) with strands spaced not more than six inches apart.

(b) Perimeter fences constructed of high tensile wire must be supported by a post or a stay at minimum intervals of 8 feet.

(c) Conventional perimeter fences must be at least 12 1/2 gauge woven wire, 14 1/2 gauge high-tensile woven wire, chain link, non-climbable woven fence, or other fence approved by the department of fish, wildlife, and parks.

(i) If the wire used is not a full 8 feet in height, it must be overlapped one row and securely fastened at every other vertical row or woven together with cable.

(d) Electric fencing materials may be used on perimeter fences only as a supplement to conventional fencing materials.

(e) All gates in the perimeter fence must be self-closing, equipped with two locking devices and installed in locations that have been approved by the department of fish, wildlife, and parks. Double gates may be required at points in the perimeter fence subject to frequent vehicle traffic that is not related to operation of the game farm.

(f) Posts used in the perimeter fence must be:

Sub-Chapter 15

Game Farms

12.6.1501 APPLICATION FOR AND RENEWAL OF GAME FARM LICENSE (1) Application for a game farm license shall be made in writing on a form prescribed by the department of fish, wildlife, and parks.

(2) The applicant shall include a $100 license fee with the initial application.

(3) A game farm license may be renewed prior to January 31 upon payment of a fee of $25.

(4) All game farm licenses expire on January 31 following the date of issuance.

(5) A game farm operator whose license has expired for more than one year will be considered a new applicant and pay the $100 initial application fee accompanied by an initial application form.

(6) The department may not renew a game farm license until the licensee has submitted the report described by section 87-4-417, MCA.

(7) If a person is issued more than one license under sections 87-4-406 through 87-4-423, sections 87-4-901 through 87-4-916, and sections 87-4-1001 through 87-4-1013, MCA, the total assessment for initial fees or for renewal fees for all licenses issued to such person may not exceed the amount of the largest individual license fee.

(8) No initial license fee shall be assessed against any person who held a game farm license on October 1983, unless there is a break in licensing of more than one year. (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84.)

12.6.1502 PURCHASE AND SALE OF GAME (IS HEREBY REPEALED) (History: Sec. 87-4-422 MCA; IMP, Sec. 87-4-416 MCA; NEW, 1984 MAR p. 250, Eff. 1/27/84; REP, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1502A BILL OF SALE/TRANSPORTATION (1) Game farm animals to be moved, transferred, bought or sold must be inspected by a department of livestock brand inspector prior to the transaction.

(2) The four copies of the bill of sale/transportation completed upon inspection of game farm animals must be dispensed as follows:

(a) original to the department of livestock;

(b) second copy to department of fish, wildlife, and parks;

(4) All game farm animals transported within the state must be marked with identification approved by the department of fish, wildlife, and parks and the department of livestock, and accompanied by a copy of the bill of sale and tattoo inspection certificate.

(5) Game farm animal gametes (ova & semen) must be handled, purchased, sold or transferred under the same rules and laws as game farm animals. (History: Secs. 81-3-202, 81-2-707, 87-4-422 MCA; IMP, Secs. 81-3-203, 81-3-210, 81-2-703, 87-4-415, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1515 IMPORTATION (1) A game farm licensee may import animals into Montana only after obtaining the following:

(a) an importation permit from the animal health division, department of livestock, 406-444-2976;

(b) a game farm license from the department of fish, wildlife, and parks that is valid for the species to be imported;

(c) an examination by an accredited veterinarian accompanied by an approved health certificate. Minimum specific disease test results and health statements that must be included on a health certificate for game farm animal(s) include:

(i) all game farm animals in the shipment tested negative for tuberculosis, brucellosis and other diseases as prescribed by the department of livestock and

(ii) the following statement signed by an accredited veterinarian in the state/province of origin: "To the best of my knowledge, animals listed herein are not infected with paratuberculosis (Johnes Disease) and have not been exposed to animals infected with paratuberculosis. To the best of my knowledge, the premises of origin have not been the site of a significant disease outbreak in the previous 24 months that was not contained and extirpated using recognized disease control standards."

(2) Additional disease testing may be required by written notification from the department of fish, wildlife, and parks or the state veterinarian prior to importation if there is reason to believe other diseases, parasites or other health risks are present (i.e. a recent outbreak of a disease not listed in this section).

(3) All elk (Cervus elaphus) must be tested prior to importation for evidence of red deer hybridization. Any animal testing positive for red deer hybridization shall not

be brought into the state. Any health certificate required by Title 81, chapter 2, MCA, to accompany imported elk found to be negative for red deer hybridization must include a certification by an accredited veterinarian that every elk in the shipment has tested negative for red deer hybridization.

(4) Imported animals must be isolated from other animals at an approved quarantine facility for at least 30 consecutive days after entry into the state.

(5) The department of fish, wildlife, and parks finds that the following species, hybrids, or viable gametes (ova and semen), are detrimental to existing wildlife and their habitats through genetic dilution, parasites, disease, habitat degradation or competition. Possession of the following prohibited species, hybrids or viable gametes is prohibited except as authorized by the department of fish, wildlife, and parks in writing:

(a) In the family Bovidae, all members of the following genera and hybrids thereof:

Subfamily Caprinae
- Rudicapra (chamois)
- Hemitragus (tahr)
- Capra (goats, ibexes--except domestic goat, Capra hircus)
- Ammotragus (Barbary sheep or Aoudad)
- Ovis (only the mouflon species, Ovis musimon)

Subfamily Hippotraginae
- Oryx (oryx and gemsbok)
- Addax (addax)

Subfamily Reduncinae
- Redunca (reedbucks)

Subfamily Alcelaphnae
- Connochaetes (wildebeests)
- Alcelaphus (hartebeests)
- Damaliscus (sassabies: blesbok, bontebok, topi)

(b) In the family Cervidae, all of the following species and hybrids thereof:

Moose (Alces alces)

All red deer (Cervus elaphus elaphus), and all hybrids with North American elk (C. elaphus canadensis, roosevelti, manitobensis, nannodes and nelsoni).

Axis deer (Axis axis)
Rusa deer (Cervus timorensis)
Sambar deer (Cervus unicolor
Sika deer (Cervus nippon)
Roe deer (Capreolus capreolus and Capreolus pygarus)

(c) All wild species in the family Suidae (Russian boar, European boar) and hybrids thereof.

(d) In the family Tayassuidae, the collared peccary (javelina) (Tayassu tajacu) and hybrids thereof.

(6) These prohibited species may not be bred, released, imported, transported, sold, bartered or traded within the state except as authorized in writing by the department of fish, wildlife, and parks. The prohibited animals may be transported out of the state in compliance with the game farm rules of the receiving state and federal laws.

(7) Persons with proof of possession prior to effective date of these rules may possess prohibited species for the life of the animals.

(8) The departments of fish, wildlife, and parks and livestock have designated the following game farm animals as "restricted species", on the basis of specific animal health risks that they pose to wildlife and/or domestic livestock: white-tailed deer (Odocoileus virginianus) and reindeer (caribou) (Rangifer sp.).

(a) Importation of white-tailed deer into Montana is allowed only for game farms currently licensed for white-tailed deer and which currently legally possess white-tailed deer. The only white-tailed deer that may be permitted entry are those originating from states west of the 100th meridian where meningeal worm is not endemic and which meet the following criteria:

(i) All animals in the shipment are certified free of meningeal worm parasites and dorsal spined larvae as determined by the currently recognized Baerman fecal flotation protocol whereby fecal samples are collected from each animal in the shipment at 30 day intervals for a total of six samplings per animal while the shipment is held in strict 180 day isolation at origin in the absence of any anthelmintic therapy; and the fecal samples are analyzed for dorsal spined larvae at an approved laboratory promptly after each collection. If any animal in the shipment is found positive on any of the six tests the entire shipment shall be rejected for importation; or

(ii) All animals in the shipment are certified free of meningeal worm parasites and dorsal spined larvae using new technology recognized capable of certifying cervids free of meningeal worm.

(b) Importation of reindeer (Rangifer sp.) into Montana is prohibited except under the following conditions:

(i) All animals in the shipment originate in a herd located south of the Canada/U.S. border that is certified brucellosis (B. suis and B. abortus) and tuberculosis free as determined by whole herd testing; and

(ii) The destination of these animals is not located west of the continental divide.

(9) Reclassification of any species listed as prohibited in part (5) or restricted in part (8) is contingent on compelling scientific information indicating that risks posed by these species to native wildlife populations and/or domestic livestock can be eliminated or managed effectively through application of new diagnostic or management technologies.

(10) Any diseased, prohibited or restricted animal determined by the department of fish, wildlife, and parks or state veterinarian to pose a significant threat to the state's wildlife resources, domestic animals or human health may be destroyed or held in quarantine at the owner's expense until disposition is determined. Possession or transfer of such animals is prohibited if contrary to the determination of department of fish, wildlife, and parks or department of livestock. (History: Secs. 81-2-707, 87-4-422 MCA; IMP, Secs. 81-2-703, 87-4-415, 87-4-422, 87-4-424 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1516 DUTY TO REPORT CONTAGIOUS DISEASES (1) Any person, including a game farm licensee who has reason to believe that game farm animals have or have been exposed to a dangerous or communicable disease, must give notice to the department of livestock immediately.

(2) The department of livestock will determine when destruction of animals, a quarantine or disinfection is required at any commercial game farm. If the department of livestock determines that destruction, quarantine or disinfection is required, a written order will be issued to the licensee describing the procedure to be followed. Required disinfection of holding facilities must be completed at the owner's expense. If the owner disagrees with the department's determination, he or she has the right to appeal the decision to the board of livestock, provided notice of such appeal is given within 48 hours of receipt of the order. (History: Sec. 81-2-103 MCA; IMP, Sec. 81-2-107 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1517 ESCAPED GAME FARM ANIMALS (1) The department or any peace officer may seize, capture, or destroy game farm animals that have escaped the possessor's control, and which are determined to be detrimental to native wildlife, habitat or other wildlife resources by threat of predation, spread of disease or parasites, habitat competition, interbreeding with native wildlife, or other significant damage.

(2) Escapes must be reported immediately to the department of fish, wildlife and parks.

(3) The licensee must recapture or destroy the animals within ten days.

(4) If the licensee is unable to recapture the animals within ten days, the department of fish, wildlife and parks may destroy them.

(5) The licensee must notify the department of fish, wildlife and parks immediately of the recapture or death of an escaped animal.

(6) The department of fish, wildlife, and parks may inspect a recaptured animal before it is returned to the game farm. (History: Sec. 87-4-422, MCA; IMP, Sec. 87-4-419 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1518 CONFISCATION PROCEDURES (1) The department of fish, wildlife, and parks may confiscate or seize any unlawfully possessed game farm animals.

(2) The costs of any confiscations or seizures of game farm animals may be charged to the owner of the animals.

(3) Any game farm licensee whose license is revoked must lawfully dispose of game farm animals in his or her possession within a period designated by the department of fish, wildlife, and parks. Failure to comply with this time limit will result in confiscation of the game farm animals by the department and/or citations for criminal conduct. (History: Sec. 87-4-422 MCA; IMP, Secs. 87-4-418, 87-4-424, 87-4-422, 87-4-423 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

12.6.1519 WAIVER (1) The departments may waive any rule they find will constitute an undue hardship to an individual game farm operator. A game farm operator wishing to receive a waiver of any rule must make application to both departments, stating with specificity why he or she has a compelling need to have a rule waived and showing that the grant of a waiver will not threaten or adversely affect any domestic or wild animal. The departments, in their discretion, may waive any rule. (History: Secs. 81-2-102, 81-3-202, 87-4-415, 87-4-422 MCA; IMP, Secs. 81-3-210, 81-2-102, 87-4-422 MCA; NEW, 1992 MAR p. 1017, Eff. 5/15/92.)

NEXT PAGE IS 12-345

APPENDIX B

PALMER ARTHUR HOOVESTAL
ATTORNEY AT LAW

608 Lincoln Rd. West
P.O. Box 5553
Helena, MT 59604

Home (406) 443-3441
Work (406) 458-9411
FAX (406) 458-6516

March 30, 1993

RECEIVED
MAR 31 1993
FIELD SERVICES

Mr. Jerry Wells
Regional Supervisor
Montana Department of Fish, Wildlife & Parks
1420 E. 6th Avenue
Helena, MT 59620

Re: Game Farm Application; Hugh D. Guthrie.

Dear Mr. Wells:

As you know, I am applying for a game farm license on behalf of Mr. Hugh Guthrie. Pursuant to your letter of March 19, 1993, please find enclosed a Game Farm Application which I am submitting on behalf of the above-referenced individual. Also find enclosed draft no. 1087 from my client trust account which should cover the filing fee.

In conjunction with this Application, please note the following information:

Pen No. 1 will be used for quarantining animals which arrive at the ranch for a period of 60 days. The animals will be held during this 60 day period for testing and observation to ensure that they are not diseased or parasitic. Any diseased or parasitic animals will be held in the double fenced area marked in red as described in Exhibit "E".

Pen No. 2 will be used for calving and winter feeding.

Pen No. 3 will be used for bulls and cows before and after calving.

Pen No. 4 will be used for pasture.

Exhibit "A" is a detailed description of the game farm located in the SW 1/4 of Section 16, and Section 21 of Township 13 North, Range 3 West, Lewis and Clark County.

Exhibit "B" is a topographical map showing the approximate locations of pens 1, 2, and 3.

Exhibit "C" is a detailed description of the perimeter of pens 1, 2, and 3.

Exhibit "D" is a topographical map of the perimeter of pen no.

4.

Exhibit "E" (also marked as Exhibit # 1-A) is a detailed description of the holding pen and quarantine facility.

Exhibit "F" (also marked as Exhibit # 1-B) is a detailed description of the working pen identified as item no. 3 in the red-outlined quarantine area identified in Exhibit "E."

Exhibit "G" is a general description of the locations of the gates in pen nos. 1,2, and 3.

Exhibit "H" is Mr. Guthrie's proof of ownership of the subject property.

Please note that the pens and fences have not yet been built. They will be built as soon as Mr. Guthrie's Game Farm Application is approved subject to construction of fencing.

Additionally, note that the actual areas of the proposed pens and fences are presently marked with flags and survey stakes for your inspection if there is any question as to the actual locations of the fences.

If you require any additional information, please do not hesitate to contact me.

Very truly yours,

Palmer Hoovestal

Enclosures

c: Mr. Hugh Guthrie

PALMER ARTHUR HOOVESTAL
ATTORNEY AT LAW

608 Lincoln Rd. West
P.O. Box 5553
Helena, Montana 59604
(406) 458-9411
FAX (406) 458-6516

Rev. 1-1-84

Fee: $100 _____ Form FG-11.1

STATE OF MONTANA

DEPARTMENT OF FISH, WILDLIFE, AND PARKS

APPLICATION FOR GAME FARM LICENSE

Name Sleeping Giant Elk Ranches
(Company or Corporation)

Address Gates of the Mountain

Post Office Box 9559, Helena, Montana

If nonresident, name and address of resident Montana agent Ken Seager,

Sleeping Giant Elk Ranches, P.O. Box 9559, Helena, MT

If a corporation, full name and address of all stockholders owning 10 percent or more stock: N/A

(Use additional sheets if necessary)

Exact legal description of the land on which the game farm is to be located:

(S.W. 1/4) Section 16, Section 21 of Township 13 N R.3 W.

MPM

County Lewis and Clark Co. - State of Montana

Above described property is legally under my control via: Fee Title _____

Contract for Deed X Lease _____ Other _____

Species of animals to be kept or reared on proposed game farm: Rocky

Mountain Elk, Mule Deer, White Tail Deer.

Name and address of the source from which applicant will acquire game farm animals Sleeping Giant Elk Ranches, Rt. 1, Box 995, Nashville, GA 31639
SEE ATTACHED*

Has above described property been fenced to prevent public game animals from mixing with game farm animals? No Attach Diagram of fencing.

Are any game animals present on the enclosed lands for which the license will be issued? No Species and number _____

I have answered correctly all questions to the best of my ability.

3/11/93
Date

Applicant Signature

PERSONAL HISTORY OF HUGH D. GUTHRIE
FOR GAME FARM APPLICATION

On behalf of Sleeping Giant Elk Ranches, I hereby make application for a Game Farm License and Game Farm Shooting License.

Name:	Hugh D. Guthrie
Soc. Sec.#:	260-52-8734
Address:	4311 Dunmore Avenue, #10, Tampa, FL 33611
Telephone:	(hm) 813-837-9146 (wk) 813-870-0960
Local Address:	P.O. Box 9559, Helena, MT 59604
Local Counsel:	Palmer Hoovestal, P.O. Box 5553, Helena, MT 59604-5553, Telephone: (406) 458-9411

PERSONAL HISTORY:

I was born on May 20, 1937, in Berrien County, Georgia. I was raised on a family farm in South Georgia, which I now own. The address at this location is South Georgia, Route 1, Box 995, Nashville, GA. We raise vegetables and other crops. We also raise cattle, hogs, horses and mules. I am familiar with raising and caring for all types of animals. I have had elk on this farm since 1984. At the present time I have twenty-four elk at this location.

In 1992, this farm was inspected by the Federal Agriculture Department and was found to be in compliance in every respect.

I have been a member of the North American Elk Breeders Association for three years. My herd number is twenty-two (22). I have attended all three conventions, and have gained valuable information from the people who work with game animals.

BUSINESS INFORMATION:

I have been a custom house broker for twenty-five years. I have also owned and operated The Copeland Co., Inc. during this time.

In January 1, 1991, I bought the Sperry Ranch from Edward Sperry with the Contract for Deed, as registered in Lewis and Clark County, State of Montana.

PLANS FOR MONTANA:

When we bought the Sperry Ranch, we planned to raise elk for breeding stock, velveting and as a shooting preserve.

At this time, we do not own anything but pure bred Rocky Mountain Elk. We plan to buy mule deer and whitetail deer from game farmers in the State of Montana.

Part of the Application for Licensing includes a drawing of the pens to be constructed.

Pen #1: Will be used for quarantining animals arriving at the ranch for a period of sixty days, at which time they may be tested and observed to be sure they contain no disease or parasite that would endanger all the animals, both wild and at the farm.

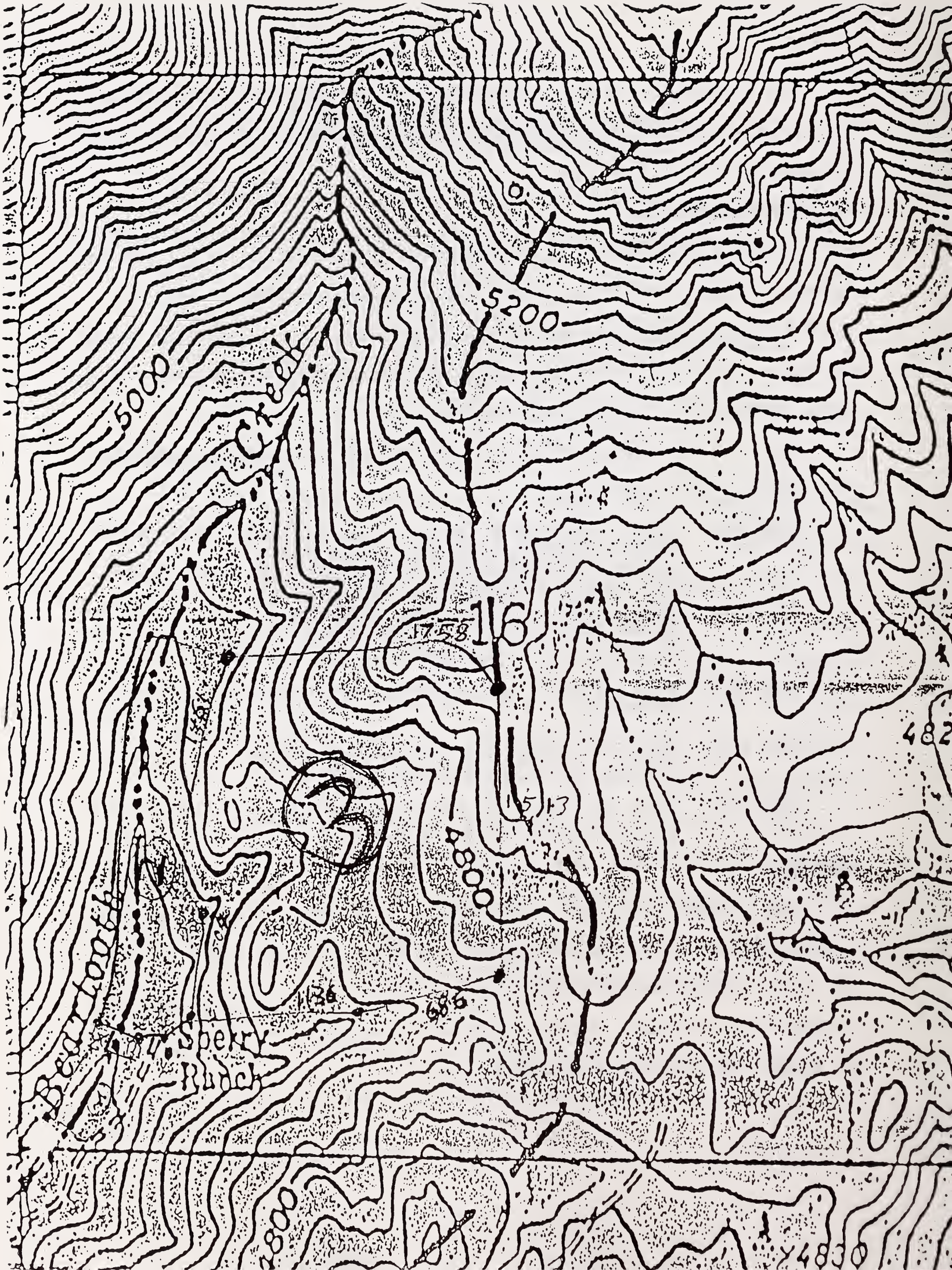
Pen #2: Will be used for calving and winter feeding.

Pen #3: Will be used for bulls and cows before and after calving.

Pen #4: Will be used primarily for hunting with the fair chase concept.

FENCING:

All fences will be constructed according to game laws and regulations. We plan to use eight foot high tinsel lock type wire. We will use three different kinds of posts: wood, steel, and reinforced concrete. We will follow all applicable laws and rules in effect by the State of Montana.

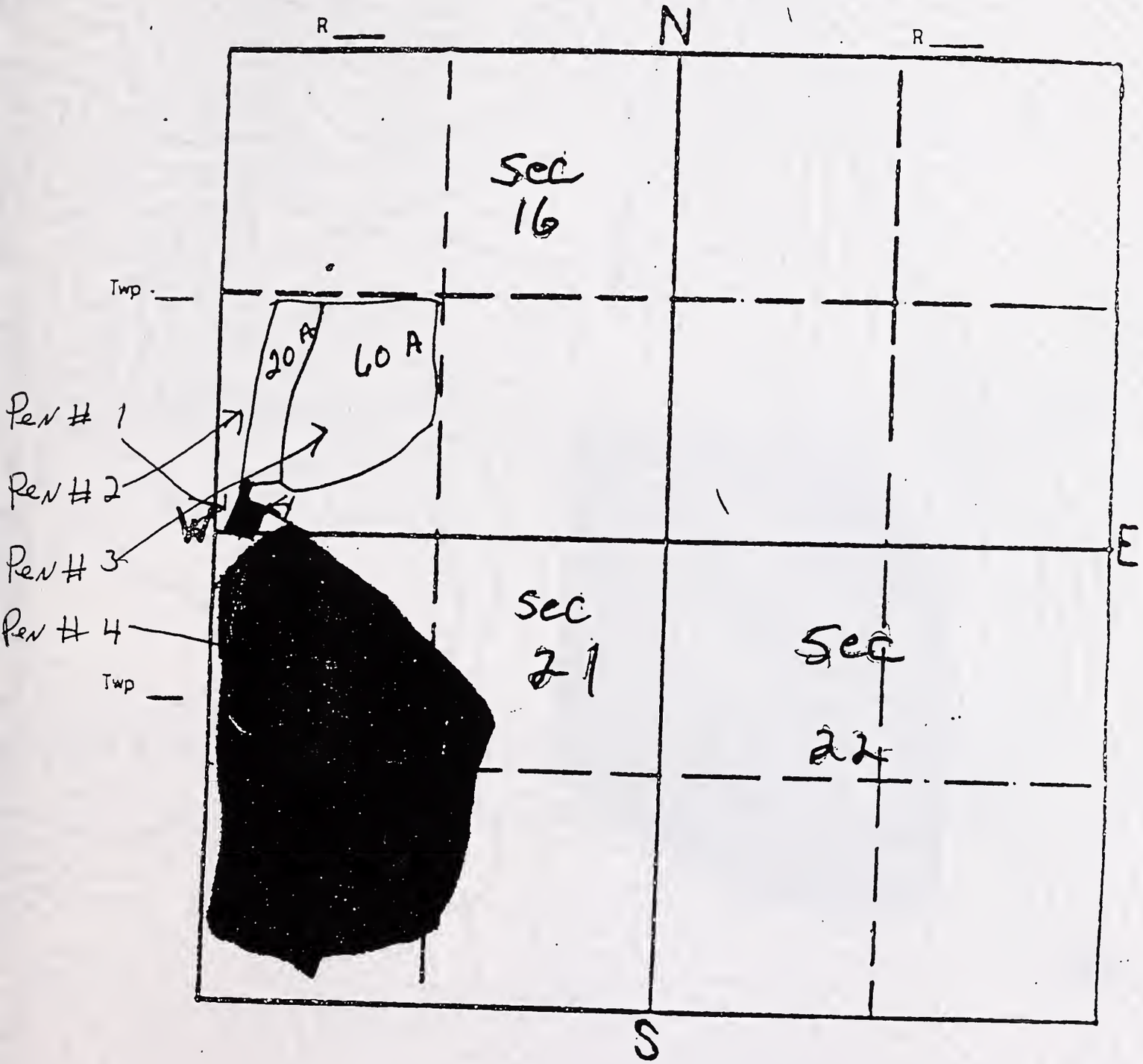

5200
5000
1758
16
1513
4800
4800
4830
Bear Mouth
Spring
Ruck

EXHIBIT

"A"

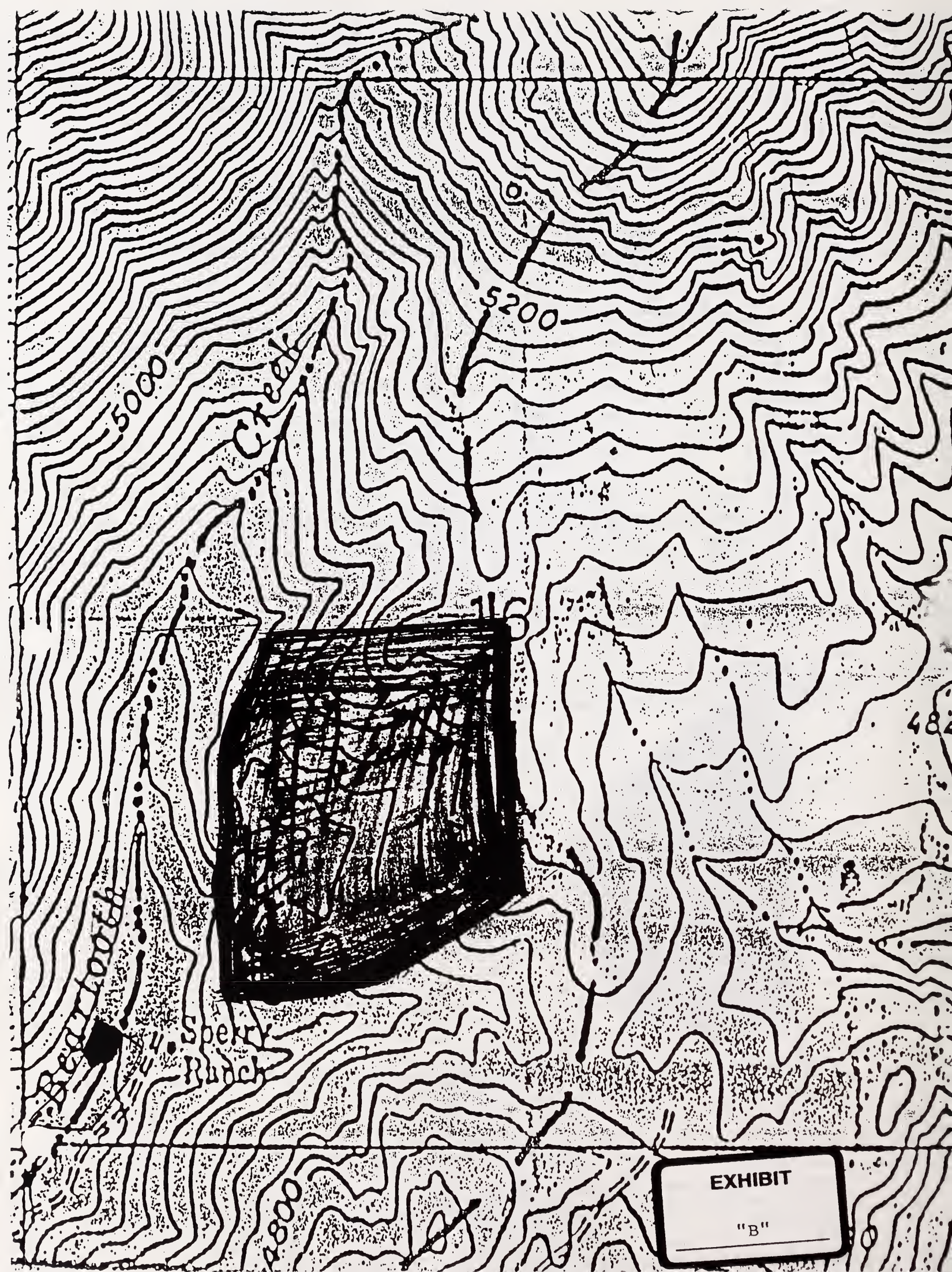
Scale 1" = 1/4 section

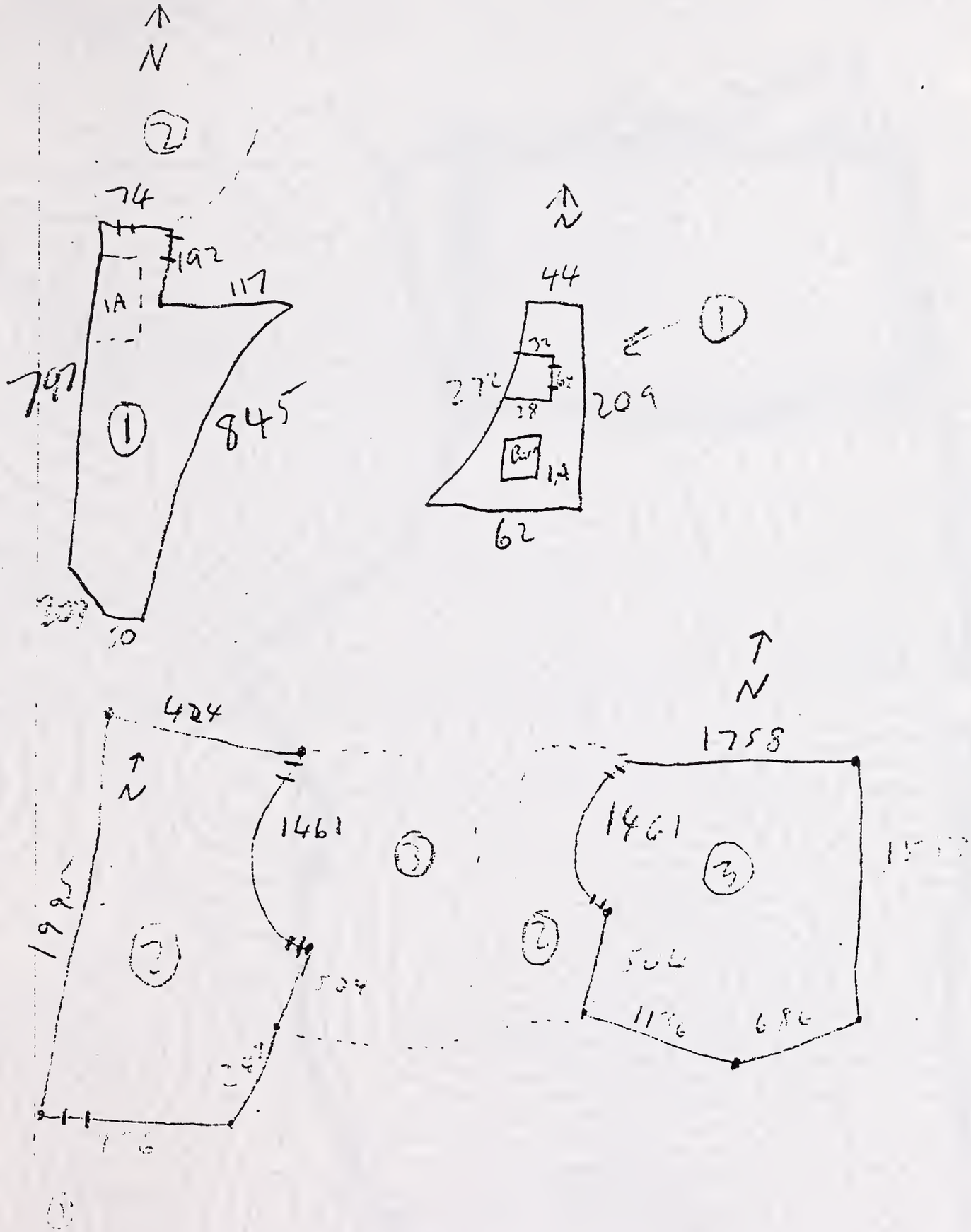
Large square represents 4 section(s)



Draw in location of game farm to scale on lands owned or leased by applicant. Fill in legal subdivision, Section number, Township and Range.

Give exact acreage contained ....


5000
5200
Creek
Redwood
Spur
Ridge
EXHIBIT
"B"


N
74
192
117
1A
797
845
1
2
10
N
44
209
62
1
N
424
1461
1925
1758
1961
504
3
2

EXHIBIT

"C"

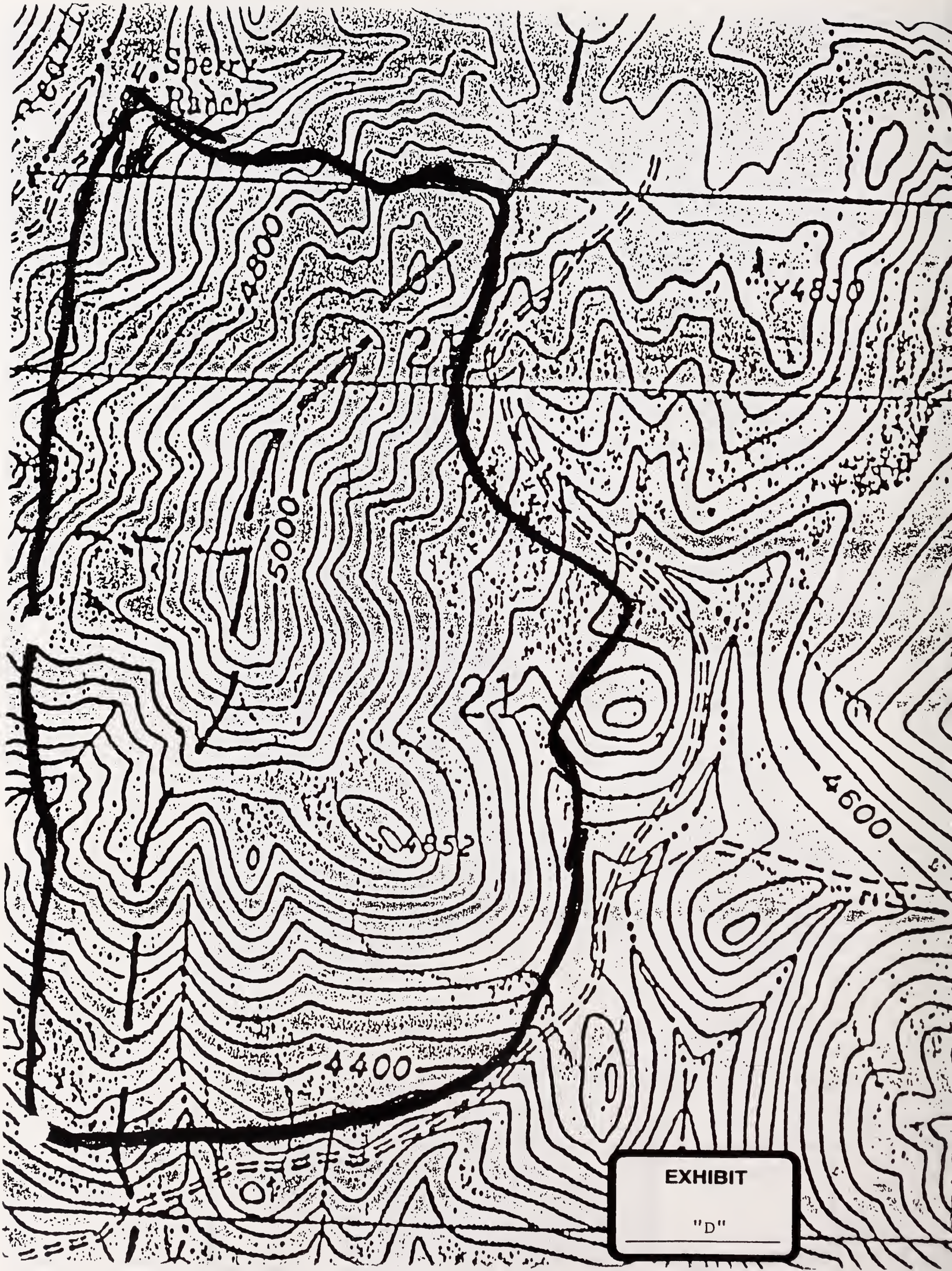
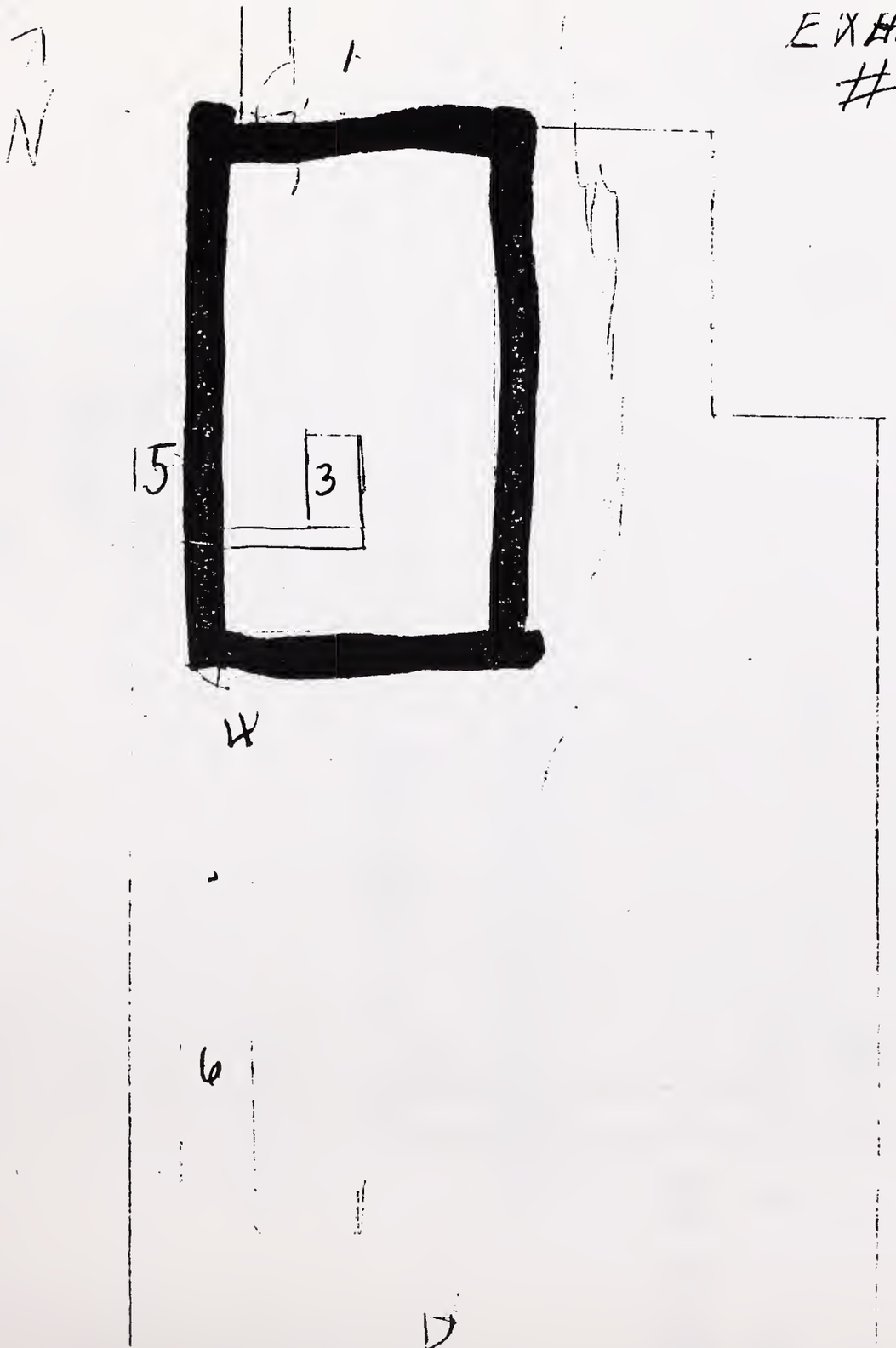

Red Rock
4800
5000
4852
4600
4400
EXHIBIT
"D"

EXHIBIT
1-A-

Pen # 1



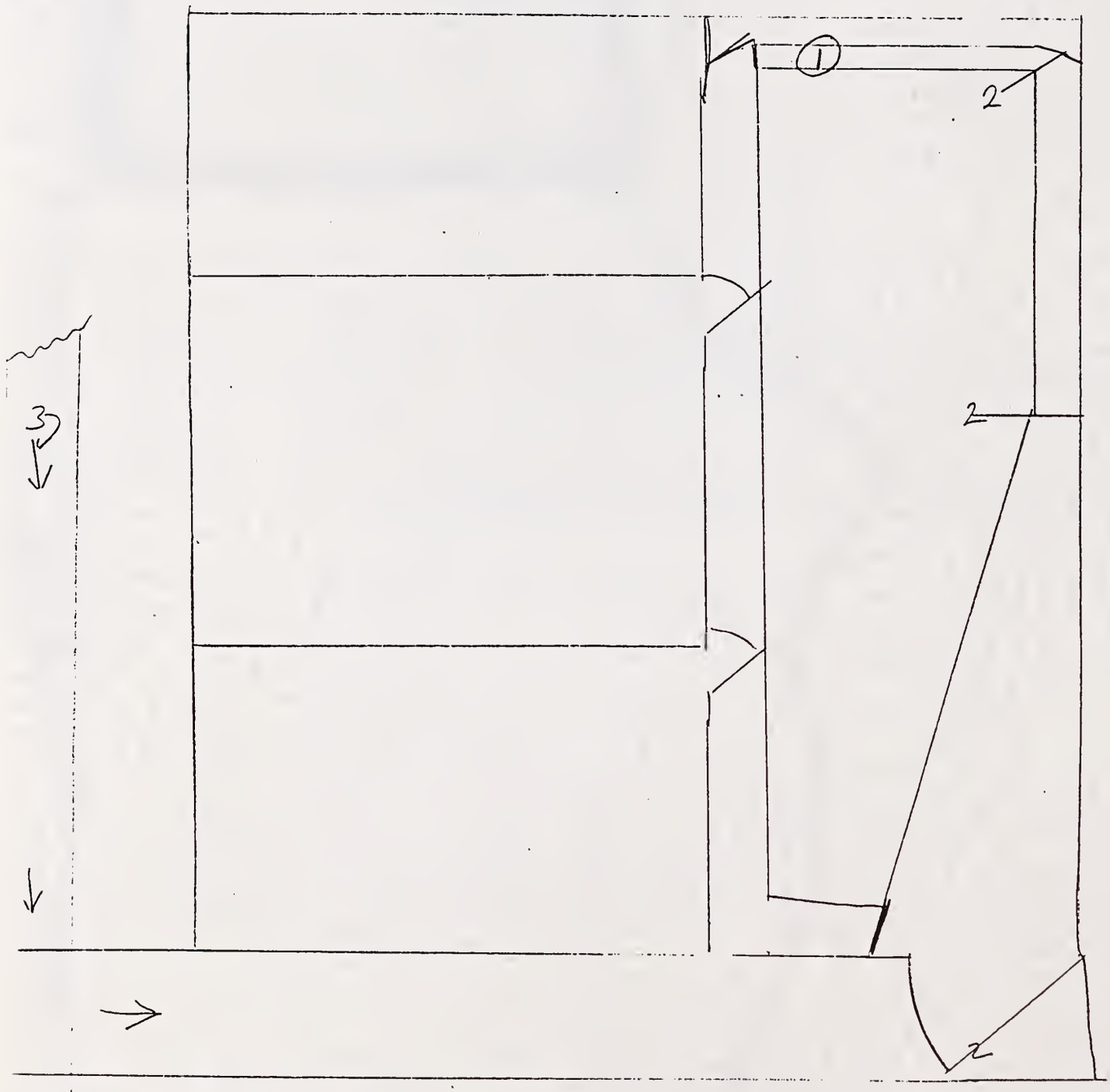
MAP LEGEND

1. Double Gates
2. 8' Fence 8' apart
3. Existing Pen - See Att
4. Single Gate
5. GATE JUNE 10 WORKING PEN
6. Separation Lane w- Gate

EXHIBIT "E"

Catch Pen For holding cattle

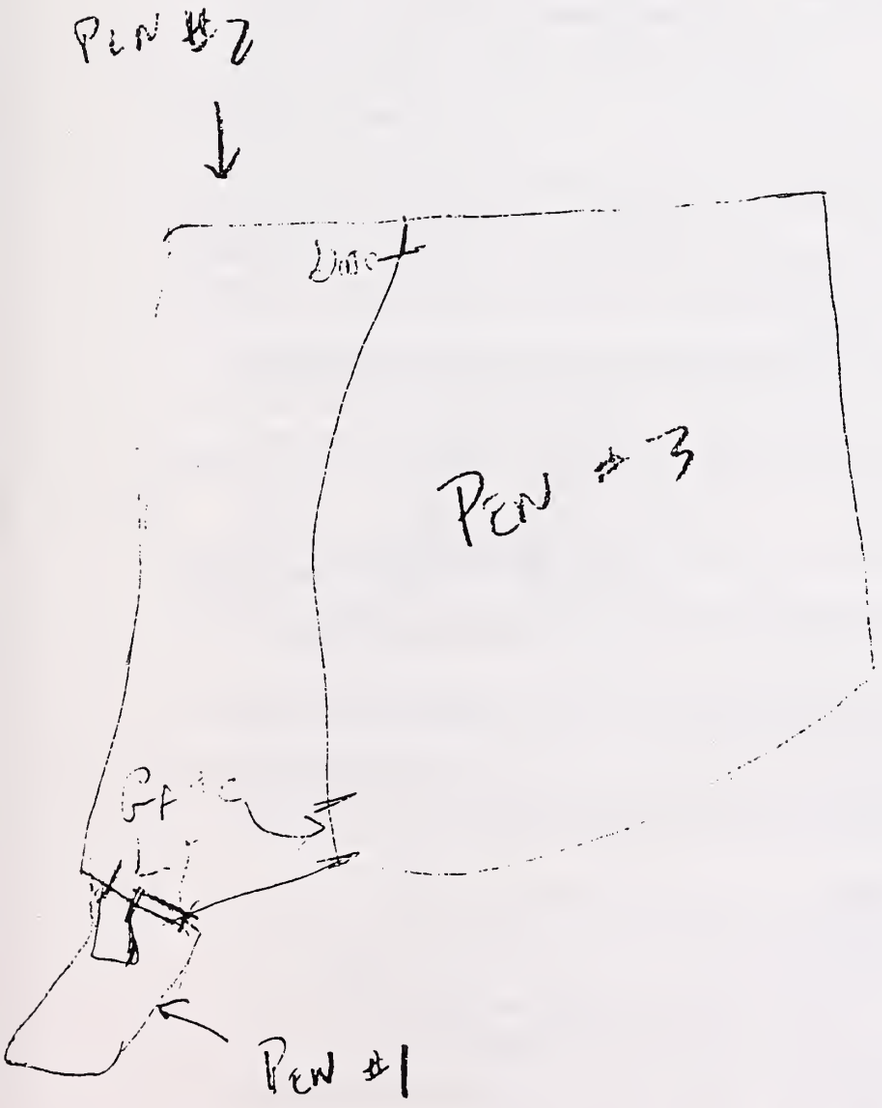
-1- Squeeze
-2- GATES
-3- Path OF ANIMALS



EXHIBIT

"F"

#1-13



EXHIBIT

"G"

AGREEMENT TO SELL AND PURCHASE
(Including Earnest Money Receipt)

This contract stipulates the terms of sale of this property. Read carefully before signing (including information on reverse side). This is a legally binding contract. If not understood, seek competent advice.

Helena, Montana, July 26, 1990

Hugh D. Guthrie, Jr. (hereinafter called "Buyer") agrees to purchase, and the undersigned Seller agrees to sell the following described real estate hereinafter referred to as "premises" commonly known as Sperry Ranch in the City of _____ County of Lewis & Clark, Montana, legally described as All Section 21 & 22 & S½W¼ of Section 16 T 13N R 3W

TOGETHER WITH all fixtures attached to the above described real property and attached buildings or structures except: None

The following items of personal property, free of liens and without warranty of condition, are included: See attached inventory

RECEIPT FOR EARNEST MONEY: The undersigned sales representative hereby acknowledges receipt from Buyer of earnest money in the amount of [redacted]

U.S. Dollars [redacted] as evidenced by ( ) cash, (✓) check, or ( )

All parties to this transaction agree that such funds will be held in trust by Edward C. Sperry Broker and deposited pursuant to Montana State Law.

N/A (Selling Real Estate Firm) By _____ (Sales Representative)

TOTAL PURCHASE PRICE IS: [redacted] U.S. Dollars

([redacted]) payable as follows:

$ [redacted] earnest money to be applied at closing

$ _____ as additional cash down payment, payable on or before closing

$ [redacted] balance of the purchase price will be paid as follows [redacted]

SPECIAL PROVISIONS: Includes all mineral & water rights. Possession to be before Jan 1, 1991

Addendum Attached (Yes) No (Circle one)

DISCOUNT POINTS: If Buyer obtains financing from a lender requiring discount points, Seller agrees to pay discount points up to a maximum of _____ percent (_____%) of the Buyer's loan. Buyer shall pay all other discount points _____

CONVEYANCE: The Seller shall convey the real property by Warranty Deed, free of all liens and encumbrances except those described in the title insurance section of this agreement. The Seller shall convey the personal property by bill of sale.

TITLE INSURANCE: Seller, at Seller's expense, shall furnish Buyer title insurance evidenced by a standard form American Land Title Association title insurance commitment in amount equal to the purchase price, committing to insure merchantable title to the real property in the Buyer's name, free and clear of all liens and encumbrances except: encumbrances hereinabove mentioned, zoning ordinances, building and use restrictions, reservations in federal patents, beneficial utility easements apparent or of record, easements of record, and

If the Seller's title is not merchantable and cannot be made merchantable before the stated closing date, 30 ADDITIONAL DAYS SHALL BE ALLOWED FOR THE SELLER TO MAKE SUCH TITLE MERCHANTABLE. Encumbrances to be discharged by the Seller shall be satisfied prior to closing or from Seller's proceeds at time of closing.

TAXES AND ASSESSMENTS: Seller and Buyer agree to prorate taxes, special improvement assessments for the current tax year, as well as pre-paid rents, if any, as of the date of closing, unless otherwise agreed _____

CLOSING DATE: The date of closing shall be Sept. 15, 1990. The parties may, by mutual agreement, agree to close the transaction at any time prior to the date specified. If third party financing is required by the terms of this agreement (includes assumptions, contracts for deeds, and lender financing), the closing shall occur on the date specified or as soon thereafter as financing is complete but no later than 60 days after the stated closing date. The Buyer and Seller will deposit with the closing agent all instruments and monies necessary to complete the purchase in accordance with this agreement. If Buyer fails to make written application for financing, apply for assumption of an existing loan or contract, or initiate any action required for completion of a contract for deed within (10) days of the date of acceptance of this agreement, Buyer will be in breach and Seller can exercise Seller's remedies under this agreement. If financing is called for herein and cannot be obtained, it is agreed that the earnest money will be returned to the Buyer.

F.H.A. BUYER: The appraised value of the property being purchased, for mortgage insurance purposes, must not be less than _____

(_____) Please refer to this section on the reverse of this form for additional disclosures of your rights.

ADDITIONAL TERMS THAT ARE AN INTEGRAL PART OF THIS AGREEMENT ARE PRINTED ON THE REVERSE SIDE OF THIS FORM. PLEASE READ THE REVERSE SIDE OF THIS FORM AS THESE TERMS WILL AFFECT YOUR RIGHTS AND RESPONSIBILITIES UNDER THIS AGREEMENT.

SALESPERSON'S REPRESENTATION: Buyer hereby acknowledges that the above identified sales representative has acted and continues to act through closing as representative and agent for the Seller, and not as representative and agent for the Buyer.

BUYER'S ACKNOWLEDGEMENT: Buyer acknowledges that he has examined the real and personal property, that Buyer enters into this agreement in full reliance upon his independent investigation and judgement, that prior verbal representations by the Seller or Seller's agents or representatives do not modify or affect this agreement, and that by signing this agreement Buyer acknowledges having read and understood this entire agreement, including the terms printed on the reverse page of this document.

BUYER'S COMMITMENT: I/We agree to purchase the above described property on the terms and conditions set forth in the above offer and grant to said sales representative _____ days to secure Seller's written acceptance.

I/WE HEREBY ACKNOWLEDGE receipt of a copy of this RECEIPT AND AGREEMENT TO SELL AND PURCHASE bearing my/our signature(s).

Buyer's Address: R.T. 1 Box 95 Nashville Ga. 31639 Buyer Signature: Hugh D. Guthrie Jr.

Phone: 912-838-6760 Buyer Signature: _____

SELLER'S COMMITMENT: I/We agree to sell and convey to Buyer the above described property on the terms and conditions hereinabove stated. I/We acknowledge receipt of copy of this agreement bearing my/our signature(s) and that of the Buyer named above. Dated this 26 day of July, 1990.

Seller's Address: 1041 Leslie Seller Signature: Edward C. Sperry

Phone: _____ Seller Signature: Debra Kay Sperry (If husband and wife, both must sign.)

DELIVERY TO BUYER OF A COPY OF ACCEPTED OFFER (one of the following methods of delivery should be used)

Date _____, 19____

The undersigned Buyer acknowledges receipt of the foregoing contract receipt bearing his/her signature and that of the Seller(s).

Buyer _____

Buyer and Seller acknowledge receipt of copy of this page, which constitutes Page 1 of 2 pages.

Date _____, 19____

Copy of foregoing contract receipt bearing copy of Buyer(s) signature and that of the Seller(s) sent via registered or certified mail.

Agent _____

1987 MONTANA ASSOCIATION OF REALTORS®
REVISED 5-88

EXHIBIT

"H"

PALMER ARTHUR HOOVESTAL
ATTORNEY AT LAW

608 Lincoln Rd. West
P.O. Box 5553
Helena, MT 59604

Home (406) 443-3441
Work (406) 458-9411
FAX (406) 458-6516

April 15, 1993

RECEIVED
APR 16 1993
FIELD SERVICES

Mr. Jerry Wells
Regional Supervisor
Montana Department of
Fish, Wildlife & Parks
1420 East 6th Avenue
Helena, MT 59620

Re: Hugh D. Guthrie;
Game Farm Application.

Dear Mr. Wells:

Pursuant to your letter of April 12, 1993 regarding the above-referenced matter, please find enclosed a Notice of Purchasers' Interest, signed and dated October 15, 1990, and a Quitclaim Deed signed and dated May 12, 1992 by Mr. Guthrie.

Should you require any additional information, please do not hesitate to contact me.

Very truly yours,

Palmer A. Hoovestal

PAH:js

Enclosures (2)

NOTICE OF PURCHASERS' INTEREST

THIS MEMORANDUM, made and entered into this 15th day of October 1990, by and between EDWARD I. SPERRY, of 1041 Leslie Avenue, Helena, Montana, Seller, HUGH D. GUTHRIE, SR. and JEWELL N. GUTHRIE, husband and wife, of Route 1, Box 995, Nashville, Georgia, and JERRY L. CHRISTISON and GENEVIEVE R. CHRISTISON, husband and wife, of 6941 No. Montana Avenue, Helena, Montana, Buyers,

WITNESSETH:

That the Seller has, on the date hereof, entered into a written Agreement for the sale to the Buyers of the following-described property situate in the County of Lewis and Clark, State of Montana, to-wit:

The Southwest Quarter (SW 1/4) of Section 16, and All of Sections 21 and 22 in Township 13 North, Range 3 West, M.P.M. in the County of Lewis and Clark, State of Montana, containing 1440 acres more or less, TOGETHER WITH THE FOLLOWING:

(1) All improvements upon the above-described property;

(2) All oil, gas and other minerals in and under said described land; and

(3) The water and water rights claimed by Seller in Statements of Claim Numbered 41I W 090207, 41I W 090208 and 41I W 090209 filed with the Department of Natural Resources and Conservation of the State of Montana.

That said Agreement has been escrowed at Morris Escrow Service of Helena, Montana, together with two Warranty Deeds, one to Hugh D. Guthrie, Sr. and Jewell N. Guthrie, husband and wife as joint tenants with right of survivorship for an undivided one-half interest, and one to Jerry L. Christison and Genevieve R. Christison, husband and wife as joint tenants with right of survivorship for the other undivided one-half interest in said property, conveying said property to Buyers; that said Agreement requires installment payments to be made by Buyers in amortization of the balance due on the purchase price, and upon payment in full of the purchase price, the escrow agent is instructed to deliver the said Warranty Deeds to Buyers; that this notice is intended as an abstract of said Agreement; that the undersigned will provide a copy of said Agreement to any

RECEIVED FROM 04.14.1993 13:19 P. 2

person without cost upon request.

IN WITNESS WHEREOF, the parties have subscribed their names hereto the day and year first above written.

EDWARD I. SPERRY

SELLER

HUGH D. GUTHRIE, SR.

JEWELL N. GUTHRIE

JERRY L. CHRISTISON

GENEVIEVE R. CHRISTISON

BUYERS

STATE OF MONTANA)
:ss.
County of Lewis and Clark)

On this 15th day of October 1990, before me, the undersigned, a Notary Public for the State of Montana, personally appeared EDWARD I. SPERRY, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

(S E A L)

NOTARY PUBLIC for the State of Montana
Residing at Helena, Montana
My commission expires July 5, 1993

STATE OF FLORIDA)
: ss.
County of Hillsborough)

On this 11th day of October 1990, before me, the undersigned, a Notary Public for the State of Florida, personally appeared HUGH D. GUTHRIE, SR. and JEWELL N. GUTHRIE, known to me to be the persons whose names are subscribed to the within instrument, and acknowledge to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

Michele A. Juncal
NOTARY PUBLIC for the State of Florida
Residing at Tampa, Florida
My commission expires: 10/4/93

(S E A L)

MICHELE A. JUNCAL
State of Florida
My Comm. Exp. 10/4/93
BONDED

STATE OF MONTANTA)
:ss.
County of Lewis and Clark)

On this 15th day of October 1990, before me, the undersigned, a Notary Public for the State of Montana, personally appeared JERRY L. CHRISTISON and GENEVIEVE R. CHRISTISON, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year in this certificate first above written.

Ellen S. Dandrea
NOTARY PUBLIC for the State of Montana
Residing at Helena, Montana
My commission expires: 1-20-92

(S E A L)

462579
SUE BARTLETT, CLERK & REC.
LEWIS & CLARK CO. MONT.
1990 OCT 19 PM 2:35
BOOK 11 PAGE 2643
PUT OF RECORD AT
Shirley McIntosh
15.00

INDEXED
RECORDED

RECEIVED FROM

04.14.1993 13:21

P. 4

QUITCLAIM DEED ORIGINAL

FOR VALUE RECEIVED, the undersigned *transferors*,

JERRY L. CHRISTISON and **GENEVIEVE R. CHRISTISON** (a husband and wife),

quitclaim unto the following *transferees*,

HUGH D. GUTHERIE and **JEWELL N. GUTHERIE** (a husband and wife who reside at **4311 Dunmore Ave., Apartment 10, Tampa, Florida 33611) as joint tenants with the right of survivorship and not as tenants in common**

all of the *transferors'* right, title, and interest in all property referred to in the AGREEMENT of 15 October 1990 between the *transferors*, the *transferrees*, and EDWARD I. SPERRY, which was the subject of the NOTICE OF PURCHASERS' INTEREST filed in **M Book 11, page 2643**, of the Clerk and Recorder's Office for Lewis and Clark County. Said property includes the **Sperry Ranch** and **State Land Lease No. 349**, both of which are **described in Exhibit A attached** and include all appurtenances and all after-acquired title.

5-12-92 5-6-92

JERRY L. CHRISTISON date **GENEVIEVE R. CHRISTISON** date

transferor ***transferor***

THE STATE OF MONTANA
COUNTY OF LEWIS AND CLARK

On this 12th day of May in the year 1992, before me, JUDITH A. KLING the undersigned Notary Public, personally appeared **JERRY L. CHRISTISON**, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

NOTARY PUBLIC for the State of Montana
(NOTARIAL SEAL) Residing at Helena, Montana
My Commission expires on 12-8-92

THE STATE OF MONTANA
COUNTY OF LEWIS AND CLARK

On this 13th day of May in the year 1992, before me, the undersigned Notary Public, personally appeared **GENEVIEVE R. CHRISTISON**, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

NOTARY PUBLIC for the State of Montana
(NOTARIAL SEAL) Residing at Helena, Montana
My Commission expires on 12-8-92

EXHIBIT A
to
QUITCLAIM DEED

The subject real estate includes:

the **SPERRY RANCH**, more specifically:

The Southwest Quarter (SW 1/4) of Section 16, and All of Sections 21 and 22 in Township 13 North, Range 3 West, M.P.M. in the County of Lewis and Clark, State of Montana, containing 1440 acres more or less, TOGETHER WITH the personal property items listed on Exhibit A hereto attached. That a Bill of Sale for the items listed on Exhibit A shall be delivered to Buyers upon execution of this Agreement, AND ALSO TOGETHER WITH THE FOLLOWING:

(1) All improvements upon the above-described property;

(2) All oil, gas and other minerals in and under said described land; and

(3) The water and water rights claimed by Seller in Statements of Claim Numbered 41I W 090207, 41I W 090208 and 41I W 090209 filed with the Department of Natural Resources and Conservation of the State of Montana.

and the **STATE LAND LEASE NO. 349**, more specifically:

The Northwest Quarter (NW 1/4) of Section 16, Township 13 North, Range 3 West, M.P.M. in the County of Lewis and Clark, State of Montana;

APPLICATION MODIFICATION RECEIVED
SEPTEMBER 13, 1994

RECEIVED
SEP 1 3 1994
FIELD SERVICES

The Sleeping Giant Elk Ranch at the Gates of the Mountains

North American Elk Breeders Association Herd Number 22

Montana Dept. of Fish Wildlife + Parks
Attn: Michael Korn

Dear Michael,

Please epcept the attached admendments to the Sleeping Giant Elk Ranch Pen #4.

Thank you for your consideration.

Hugh Guthrie

Attachments



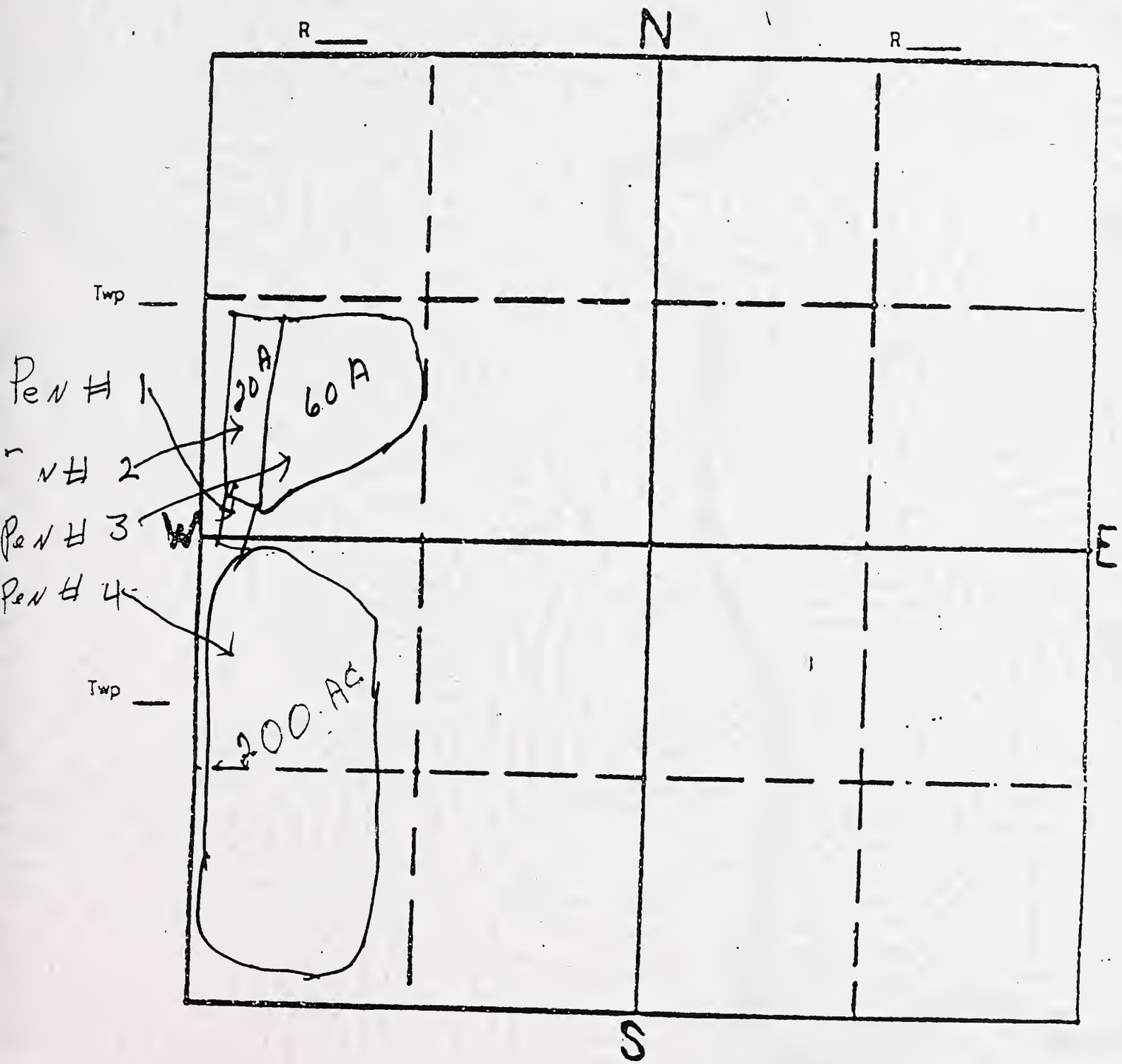


P.O. Box 9559 o Helena, Montana 59604 o Owners: Hugh & Jewell Guthrie
813/870-0960

RECEIVED
SEP 1 3 1994
FIELD SERVICES

Scale 1" = 1/4

Large square represents 4 section(s)



Draw in location of game farm to scale on lands owned or leased by applicant. Fill in legal subdivision, Section number, Township and Range.

Give exact name


Sbeky
Rabch
4800
5000
4600
4400

APPENDIX C

RECEIVED

SEP 2 2 1994

APPLICATION A.

Application A must be completed for new game farms or expansions and physical changes to existing game farms. Attach fee of $200.



The Department of Fish, Wildlife and Parks has authority to regulate game farms as contained in Title 87, Chapter 4, Part 4, MCA, and ARM 12.6, Chapter 15.

1. Name of business Sleeping Giant Ranch

   Primary purpose of business Game Farm (Deer & Elk); Horses; Cattle.

2. Names, addresses, and phone numbers of applicants.

Hugh D. Guthrie	Hugh D. Guthrie
2001 PanAm Circle	P.O. Box 9559
Suite 109	Helena, MT 59604
Tampa, FL 33607	No Phone #
(813) 870-0960	Message Phone:
	Palmer Hoovestal
	(406) 458-6447

3. Names, addresses, and phone numbers of shareholders who own more than 10% of the stock (if applicant is a corporation):

   N/A

APPLICATION A (cont'd.).

4. Name, address, phone number of resident Montana agent and manager:

Ken Seager	Palmer Hoovestal, Esq.
P.O. Box 9559	P.O. Box 5553
Helena, MT 59604	Helena, MT 59604
No Phone Number	(406) 458-6447

5. Is application for a new game farm? Yes

Is application for expansion of existing game farm? No

6. Estimated construction/commencement date Upon issuance of license from MDFWP

Estimated construction/completion date Spring 1996

Estimated date for future expansion None

7. Exact legal description of game farm (county, range, township, section):

Lewis and Clark County, SW 1/4 Section 16,TI3 N, R 3 W, Section 21, T 13 N, R 3 W.

Exact legal description of planned expansions:

N/A

APPLICATION A (cont'd.).

8. Above property is legally under my control via:

Fee Title _____ Contract for Deed X Lease _____

If leased, duration of lease N/A

Provide proof of control by attaching a copy of the legal documentation or by providing recording information at the county courthouse. See Notice of Purchaser's Interest and Quitclaim Deed hereto attached and incorporated herein by this reference.

Other N/A

9. Game farm size. List total number of acres in game farm and breakdown by categories listed:

Total Acreage		320
a.	Developed Acreage:	
	Residential	1
	Industrial	0
b.	Recreational Acreage	0
c.	Wetlands/Riparian	0
d.	Floodplain	0
e.	Productive Acreage:	
	Irrigated Crop Land	0
	Dry Crop Land	0
	Range Land	140
	Forest	180
	Other	0

APPLICATION A (cont'd.).

10. List all streams, ditches, and bodies of water within the exterior boundaries of game farm and within the exterior boundaries of future expansion plans of game farm. List drainage(s) in which game farm is to be constructed.

Beartooth Creek; ponds

11. If a diversion point or ditch rights within the game farm are held by another, list name and address of holder.

N/A

12. List all easements within game farm boundaries, and list name and address of easement holders. Attach copy of all easements of record.

N/A

APPLICATION A (cont'd.).

13. Submit a detailed scale drawing of the existing game farm or the proposed construction thereof and expansion plans using the most recent USGS 7.5 series topographic map. List numerically and show the following items:

A. Exterior Boundaries "See Attached Exhibits"
   (1) location
   (2) fence specifications
   (3) gate locations and type

B. Cross Fences "See Attached Exhibits"
   (1) location
   (2) fence specifications
   (3) gate locations and type

C. Special Facilities (quarantine, holding pens, barns, feeding stations, watering stations) "See Attached Exhibits"
   (1) location
   (2) fence specifications
   (3) gate locations and type
   (4) water system, location and type

14. Quarantine Plan. List the following: "See Attached Exhibits"

A. Location
B. Type of Structure
C. Type of Gate Security System
D. Holding Capacity

15. Total number of animals to be held or owned by game farm:
100 Elk (50 males, 50 females) and 20 Whitetail Deer (10 males, 10 females)

A. Species, number and sex of each species
B. Location, if boarded
Not boarded.

16. Plans for boarding animals not owned by the business:
None.

A. Holding Area
B. Species and Number of Each Species

APPLICATION A (cont'd.).

17. Operation Plan. List the following:

A. Water Source	- Beartooth Creek; Spring fed H20 Tanks
B. Feed Type	- Natural
C. Cover/Protection	- Natural
D. Type of Operation	- All of below.
(1) breeding stock	
(2) meat production	
(3) antler production	
(4) trophy sales	

18. List number and source of original captive animals.
Nashville, Georgia, Sleeping Giant Elk Ranches; also proposes to acquire deer from Montana sources.

19. Estimate the total number and species of wildlife presently utilizing the proposed game farm area.
Deer and Elk - unknown.

20. List any felony convictions of the owners and managers. Also list all convictions, as well as bond forfeitures, for violations of fish and game laws and regulations within this state or any other state or province by the owners/manager.

None

I declare that all of the statements on this form are true and correct, and hereby agree to the use of the information on this form.

Signature Hugh Gittins Date 9-22-94

APPENDIX D

LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

Survey Area- LEWIS AND CLARK COUNTY AREA, MONTANA

Map symbol and soil name	Land capability		ALFALFA HAY		BARLEY		GRASS-LEGUME HAY		OATS		PASTURE	
	N	I	N	I	N	I	N	I	N	I	N	I
			(TONS)		(BU)		(TONS)		(BU)		(AUM)	
1980 PERMA	4E	4E		4.5		39		4.0		33		4.5

CLASSIFICATION OF THE SOIL

Survey Area: LEWIS AND CLARK COUNTY AREA, MONTANA

Soil Name	Family or higher taxonomic class
CASTNER	LITHIC HAPLOBOROLLS, LOAMY-SKELETAL, MIXED
TOLMAN	LITHIC ARGIBOROLLS, LOAMY-SKELETAL, MIXED
TOLEX	LITHIC EUTROBORALFS, LOAMY-SKELETAL, MIXED
PERMA	TYPIC HAPLOBOROLLS, LOAMY-SKELETAL, MIXED
NORMONT	TYPIC EUTROBORALFS, LOAMY-SKELETAL, MIXED
HOLTER	TYPIC ARGIBOROLLS, LOAMY-SKELETAL, MIXED
HALL	ARIDIC ARGIBOROLLS, LOAMY-SKELETAL, MIXED

(An asterisk in the first column indicates that the soil is a taxadjunct to the series. See text for a description of those characteristics of the soil that are outside the range of the series)

PHYSICAL AND CHEMICAL PROPERTIES OF THE SOILS

rvey Area- LEWIS AND CLARK COUNTY AREA, MONTANA

Map Symbol	Soil Name	Depth (In)	Clay (pct)	Moist Bulk Density (g/cm3)	Permeability (In/hr)	Available water cap (In/In)	Soil Reaction (ph)	Salinity (mmhos/cm)	Shrink-Swell Pot.	Erosion Factors K	Erosion Factors T	Wind Erod. Group	Organic Matter (pct)
	HOLTER	0- 8	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-7.3	-	LOW	.20	3 6	2.- 5.	
		8-12	18-27	1.20-1.40	0.6- 2.0	0.08-0.10	5.6-7.3	-	LOW	.10		1.- 3.	
		12-42	25-35	1.30-1.50	0.6- 2.0	0.07-0.08	6.1-7.3	-	MODER	.10		.5- 1.	
		42-60	10-25	1.20-1.40	0.6- 2.0	0.07-0.08	7.4-8.4	-	LOW	.10		-	
	CABINER	0- 8	10-18	1.10-1.30	0.6- 6.0	0.12-0.14	6.6-7.8	-	LOW	.20	1 5	2.- 4.	
		8- 8	10-18	1.30-1.55	0.6- 6.0	0.06-0.08	6.6-8.4	-	LOW	.10		-	
		8-16	10-18	1.55-1.65	0.6- 6.0	0.06-0.07	6.6-8.4	0- 2	LOW	.10		-	
		16-60	-	-	-	-	-	-				-	
	MOCMONT	0-14	15-20	1.15-1.35	2.0- 6.0	0.08-0.10	5.6-6.5	-	LOW	.15	2 5	1.- 3.	
		14-60	15-20	1.30-1.50	2.0- 6.0	0.04-0.05	5.6-6.5	-	LOW	.05		-	
	TOLEX	0- 5	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-6.5	-	LOW	.20	1 5	2.- 4.	
		5-13	27-35	1.45-1.65	0.6- 2.0	0.04-0.05	5.6-6.5	-	MODER	.05		-	
		13-19	10-25	1.45-1.65	0.6- 2.0	0.04-0.05	6.6-7.8	-	LOW	.05		-	
		19-60	-	-	-	-	-	-				-	
C	PERMA	0-10	7-20	1.30-1.50	0.6- 2.0	0.12-0.14	6.6-7.8	-	LOW	.17	2 5	2.- 4.	
		10-15	7-20	1.40-1.60	0.6- 2.0	0.08-0.09	6.6-7.8	-	LOW	.10		-	
		15-60	0-15	1.50-1.70	2.0- 6.0	0.03-0.04	6.6-7.8	-	LOW	.05		-	
E	TOLEX	0- 5	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-6.5	-	LOW	.20	1 5	2.- 4.	
		5-13	27-35	1.45-1.65	0.6- 2.0	0.04-0.05	5.6-6.5	-	MODER	.05		-	
		13-19	10-27	1.45-1.65	0.6- 2.0	0.04-0.05	6.6-7.8	-	LOW	.05		-	
		19-60		-	-	-	-	-				-	
	TOLMAN	0- 5	18-22	1.15-1.25	0.6- 2.0	0.13-0.14	6.1-7.3	-	LOW	.20	1 5	2.- 4.	
		5-19	20-35	1.25-1.35	0.6- 2.0	0.06-0.11	6.1-7.3	-	LOW	.24		.5- 1.	
		19-60	-	-	-	-	-	-				-	
	HALL	0- 5	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	6.1-7.3	-	LOW	.20	2 6	2.- 4.	
		5-15	27-35	1.30-1.50	0.6- 2.0	0.06-0.07	6.1-7.3	-	MODER	.10		-	
		15-24	10-25	1.20-1.50	0.6- 2.0	0.04-0.05	6.6-7.8	-	LOW	.05		-	
		24-60	-	-	-	-	-	-				-	
E	TOLEX	0- 5	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-6.5	-	LOW	.20	1 5	2.- 4.	
		5-13	27-35	1.45-1.65	0.6- 2.0	0.04-0.05	5.6-6.5	-	MODER	.05		-	
		13-19	10-25	1.45-1.65	0.6- 2.0	0.04-0.05	6.6-7.8	-	LOW	.05		-	
		19-60	-	-	-	-	-	-				-	
	HOLTER	0- 8	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-7.3	-	LOW	.20	3 6	2.- 5.	
		8-12	18-27	1.20-1.40	0.6- 2.0	0.08-0.10	5.6-7.3	-	LOW	.10		1.- 3.	
		12-42	25-35	1.30-1.50	0.6- 2.0	0.07-0.08	6.1-7.3	-	MODER	.10		.5- 1.	
		42-60	10-25	1.20-1.40	0.6- 2.0	0.07-0.08	7.4-8.4	-	LOW	.10		-	
	CABINER	0- 8	10-18	1.10-1.30	0.6- 6.0	0.12-0.14	6.6-7.8	-	LOW	.20	1 5	2.- 4.	
		8- 8	10-18	1.30-1.55	0.6- 6.0	0.06-0.08	6.6-8.4	-	LOW	.10		-	
		8-16	10-18	1.55-1.65	0.6- 6.0	0.06-0.07	6.6-8.4	0- 2	LOW	.10		-	
		16-60	-	-	-	-	-	-				-	
F	TOLEX	0- 8	15-25	1.20-1.40	0.6- 2.0	0.12-0.15	5.6-6.5	-	LOW	.20	1 5	2.- 4.	
		8-13	27-35	1.45-1.65	0.6- 2.0	0.04-0.05	5.6-6.5	-	MODER	.05		-	
		13-19	10-25	1.45-1.65	0.6- 2.0	0.04-0.05	6.6-7.8	-	LOW	.05		-	
		19-60	-	-	-	-	-	-				-	
	MOCMONT	0-14	15-20	1.15-1.35	2.0- 6.0	0.08-0.10	5.6-6.5	-	LOW	.15	2 5	1.- 3.	
		14-60	15-30	1.30-1.50	2.0- 6.0	0.04-0.05	5.6-6.5	-	LOW	.05		-	

LAND CAPABILITY CLASSES AND YIELDS PER ACRE OF CROPS AND PASTURE

Survey Area: LEWIS AND CLARK COUNTY AREA, MONTANA

Map symbol and soil name	Land capability		Alfalfa hay		Barley		Oats		Wheat, winter	
	N	I	N	I	N	I	N	I	N	I
			(Tons)		(Bu)		(Bu)		(Bu)	
1330 Herma	e5	4E	4.5		39		63		24	

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- LEWIS AND CLARK COUNTY AREA, MONTANA

Map Symbol	Description

25-60 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 3.0-3.7; MAJOR CONSIDERATIONS: SLOPE; LANDUSE MAY INCLUDE: WOODLAND.

ROCK OUTCROP (NO DATA)

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- LEWIS AND CLARK COUNTY AREA, MONTANA

Map Symbol.	Description
	TOLMAN CHANNERY LOAM IS 10-20 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.4-2.2; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: RANGELAND.
	HALL CHANNERY LOAM IS 20-40 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.6-1.9; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: RANGELAND.
7035	TOLEX-HOLTER-CARTNER CHANNERY LOAMS, 8 TO 45 PERCENT SLOPES TOLEX CHANNERY LOAM IS 10-20 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: WOODLAND.
	HOLTER CHANNERY LOAM IS MORE THAN 60 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 4.6-5.4; MAJOR CONSIDERATIONS: SLOPE; LANDUSE MAY INCLUDE: RANGELAND.
	CARTNER CHANNERY LOAM IS 10-20 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: RANGELAND.
963F	TOLEX-ROCKMONT-ROCK OUTCROP COMPLEX, 25 TO 60 PERCENT SLOPES TOLEX CHANNERY LOAM IS 10-20 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF 25-60 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: WOODLAND.
	ROCKMONT VERY CHANNERY LOAM IS MORE THAN 60 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF

NONTECHNICAL SOILS DESCRIPTION REPORT
FOR DESCRIPTION CATEGORY - ALL

Survey Area- LEWIS AND CLARK COUNTY AREA, MONTANA

Map Symbol:	Description
1D	USTIC TORRIFLUVENTS, 0 TO 4 PERCENT SLOPES USTIC TORRIFLUVENTS (NO DATA)
61E	HOLTER-CASTNER CHANNERY LOAMS, 8 TO 45 PERCENT SLOPES HOLTER CHANNERY LOAM IS MORE THAN 60 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 4.6-8.4; MAJOR CONSIDERATIONS: SLOPE; LANDUSE MAY INCLUDE: RANGELAND. CASTNER CHANNERY LOAM IS 10-20 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: RANGELAND.
66F	WOOMONT-TOLEX COMPLEX, 25 TO 60 PERCENT SLOPES WOOMONT VERY CHANNERY LOAM IS MORE THAN 60 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF 25-60 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 3.0-3.7; MAJOR CONSIDERATIONS: SLOPE; LANDUSE MAY INCLUDE: WOODLAND. TOLEX CHANNERY LOAM IS 10-20 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF 25-60 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: WOODLAND.
189C	PERMA GRAVELLY LOAM, 2 TO 15 PERCENT SLOPES PERMA GRAVELLY LOAM IS MORE THAN 60 INCHES DEEP WITH A DARK COLORED SURFACE LAYER AND SLOPES OF 2-15 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 3.0-3.7; MAJOR CONSIDERATIONS: NONE; LANDUSE MAY INCLUDE: CROPLAND, RANGELAND.
548E	TOLEX-TOLMAN-HAJE CHANNERY LOAMS, 8 TO 45 PERCENT SLOPES TOLEX CHANNERY LOAM IS 10-20 INCHES DEEP WITH A LIGHTER COLORED SURFACE LAYER AND SLOPES OF 8-45 PERCENT. LANDFORM: NO DATA; FROST FREE DAYS: NO DATA; AVAILABLE WATER CAPACITY IN INCHES: 1.1-1.4; MAJOR CONSIDERATIONS: SLOPE, DEPTH TO HARD ROCK; LANDUSE MAY INCLUDE: WOODLAND.


GS-VEFW-1-45-
61E
61E
380
567D
61E
22
23
567D
61E
567D
69C
567D
61E
234C
890
563
567D
61E
567D
28
26
567D
234C
532B
61E
34B
IB
234C
565E
532B


360F
963F
360F
4
863E
61E
863E
360F
9
400
963F
400
963F
61E
763E
61E
763F
763F
61E
61E
763E
963F
360F
3
61E
763E
363F
360F
234C
360F
463F
400
234C
360F
61E
15
360F
863E
360F

SLEEPING GIANT ELK RANCH
SOIL CHARACTERISTICS

TYPE	PERMIABILITY	RUN-OFF	ERODABILITY
188C Perma	Moderate	Medium	Moderate-Severe
563E Tolex	Moderate	Rapid	Severe-V.Severe
Tolman	Moderate	Rapid	Severe-V.Severe
Hauz	Moderate	Rapid	Severe-V. Severe
763E Tolex	Moderate	Rapid	Severe-V. Severe
Holter	Moderate	Rapid	Severe-V. Severe
Castner	Moderate	Rapid	Severe-V. Severe
963F Tolex	Moderate	Rapid	Very Severe
Mocmont	Moderate	Rapid	Very Severe

APPENDIX E

SUMMARY OF BACKGROUND INFORMATION
PERTAINING TO REGULATION OF THE GAME FARM INDUSTRY

Compiled by the Wildlife Division
Montana Department of Fish, Wildlife and Parks

INTRODUCTION:

The game farm industry has recently experienced national and international growth and expansion, fueled by a lucrative market for breeding stock, market potential for meat and other animal products, Asian demand for certain animal parts - particularly velvet antlers from deer and elk, and trophy shooting. Unprecedented international marketing and translocation of live animals is of increasing concern to wildlife managers and livestock interests, due to attendant threats to native wildlife populations and domestic livestock. In the U.S., wildlife concerns are most accentuated in western states that feature extensive wildlife habitats and premiere wildlife resources -- most especially the Rocky Mountain states, where wildlife is a significant cultural and economic asset.

The need for adequate safeguards for wildlife populations and domestic livestock has prompted wildlife and agriculture agencies in other states, as well as other countries, to institute game farm regulations that emphasize the following: 1) importation requirements for game farm animals, including disease screening and testing, 2) importation bans for deleterious animal species, 3) record keeping requirements, including individual animal identification, and 4) minimum requirements for game farm facilities (fences and equipment to restrain, handle and quarantine animals). Montana, Washington, Oregon and Nevada are currently in the process of updating or revising obsolete game farm rules and statutes. Other western states have either done so recently (Wyoming, Utah, Idaho, California and Colorado) or plan to do so in the near future (North and South Dakota). The following game farm issues are not unique to Montana....they are regional, national and international in scope:

- Some varieties of game farmed animals are known to pose the following threats to wildlife: 1) introduction and transmission of diseases and exotic parasites (a potential threat to domestic livestock also), 2) hybridization/genetic pollution of native wildlife populations, and/or 3) habitat competition/degradation, resulting from establishment of feral populations of escaped game farm animals. The history of game farming around the world demonstrates that any one of these risk factors can result in permanent, irreversible damage to native wildlife resources.

• The track record of game farming in Montana and in other states and provinces indicates that escape of game farm animals from their enclosures is inevitable (Lanka et al. 1990). Causes of such escapes include: inadequate fencing, poor fence maintenance, fallen trees, fire, flooding, wind, drifted snow, damage to fences by confined animals or wild animals during breeding season, vehicle accidents, gates left open, etc. Therefore, any animal species or hybrid that is game farmed in Montana will in all likelihood come into contact with native wildlife and domestic livestock. To provide effective containment of game farmed animals and minimize the potential for contact between game farm animals and wildlife populations or livestock, states and provinces have instituted minimum fencing requirements for game farms. In addition, states and provinces have imposed importation bans on animal species or hybrids that are difficult to contain or recapture, and that clearly pose the threat of irreversible damage to wildlife populations through transmission of diseases or parasites, hybridization or habitat competition/degradation.

• Regulations requiring animal handling and/or quarantine facilities have proven to be necessary to provide the capability for game farm operators and game farm regulators to verify animal identification (ear tags and/or tattoos) and accomplish disease testing, treatment and control. Record keeping requirements, including individual animal identification, have also proven to be prerequisite to accomplishing disease monitoring and control, providing a means to backtrack ownership and movement of individual game farm animals. Record keeping requirements also serve as a deterrent to theft of native wildlife.

• Recent growth of the game farming industry has fueled a number of controversial issues associated with certain game farm practices:

- illegal activities prompted by a lucrative market in wild animals and animal parts, including poaching of wild animals, illegal trade in animal parts, and illegal capture and confinement of wild animals.
- detrimental impacts associated with locating game farm facilities in critical wildlife habitats, including obstruction of traditional migration routes and displacement of wildlife from traditional winter ranges.
- ethical and philosophical concerns about game farm practices that affect public perception of traditional sport hunting, including "canned hunts" (commercial shooting of penned, constrained or tame animals).
- animal welfare concerns, to include conditions under which animals are confined and cared for, and practices such as de-antlering elk and deer.
- expense of regulating the game farm industry, which in

other states and provinces has necessitated diversion of funds from existing wildlife management programs.

DISEASES AND PARASITES of wildlife and captive game farmed animals are not nearly as well documented or researched as they are for domestic livestock. Existing disease testing procedures, developed for use in domestic livestock, do not always provide definitive diagnosis for native wildlife or exotic species. False negative and false positive test results are known to occur with most testing procedures (Lanka et al. 1990). Diagnostic tests have not even been developed for a number of wildlife diseases, restricting identification of such diseases to postmortem examination. These circumstances, combined with escalating trade and translocation of game farm animals (nationally and internationally) have significantly increased the potential for diseases or parasites to be inadvertently introduced to game farms and subsequently, to nearby wildlife populations and/or domestic livestock. Species (and hybrids thereof) that pose known animal health threats to Montana wildlife populations include: wildebeests, hartebeests and sassabies (malignant catarrhal fever); imported moose (especially those from areas where meningeal worm or the large liver fluke is endemic); wild hogs and javelina (pseudorabies); imported white-tailed deer (from areas where meningeal worm is endemic or individuals exposed to infected whitetails); and caribou and reindeer (carriers of Brucella suis type 4).

HYBRIDIZATION/GENETIC POLLUTION: Hybridization may occur between different species, different races (subspecies) and distinct populations within a subspecies. Fertile hybrids are common within certain groups of mammals (e.g., sheep, Ovis sp.; goats and ibex Capra sp.; and deer, Cervus sp.). Cross-breeding of subspecies can have significant impacts on wild populations because such hybrids are most likely to result in viable, fertile offspring. Reproduction of hybrids in the wild results in genetic pollution of the gene pool of native wildlife species. Some hybrids may even have a competitive advantage over closely related native species....due to higher reproductive potential, (larger litter size or earlier breeding age), more aggressive social and breeding behavior, more flexible dietary requirements, or greater disease resistance. For example, red deer and red deer hybrids have a competitive advantage over American elk by virtue of the more aggressive breeding behavior of male red deer and red deer hybrids. Species (and hybrids thereof) that present known hybridization threats to native Montana wildlife populations include red deer, sika deer, axis deer and mouflon.

HABITAT COMPETITION/DEGRADATION: History is replete with examples of both intentional and inadvertent introductions of exotic plant and animal species with unanticipated and undesirable results. Familiar examples in the U.S. include introduction of the

English sparrow, nutria, grass carp and Mediterranean fruit fly, as well as a host of noxious plant species such as spotted knapweed, Canada thistle and purple loosestrife. Another example of local significance is the introduction of mysis shrimp into Flathead Lake. In the case of many exotic animal species, the potential for habitat competition/degradation is accentuated by attributes such as a high reproductive potential (large litter size or early breeding age), aggressive social behavior, flexible dietary requirements, absence of effective predators, and resistance to disease.

Feral populations of game farm animals have caused significant damage to wildlife habitat in a number of other states - wild hogs being one of the most notable. Habitat competition/degradation problems are most accentuated in southwestern states, which provide a "crystal ball" view of problems that Montana could ill afford to cope with. Two species of ibex and gemsbok have established feral populations in New Mexico, to the detriment of native deer and desert sheep populations. In Texas, feral populations of nilgai antelope, axis deer, aoudad, sika and fallow deer (in order of prevalence) are well-established (Teer 1992). A 1988 survey of exotic animals in Texas documented 123 species or varieties of exotics in the state (Traweek 1989). A total of 90,400 animals was confined and an estimated 73,857 were free-ranging, for a combined statewide total of 164,257 (not including feral hogs). Many of these animals are of questionable ancestry, including many that are inbred or hybrid. Studies conducted on the Kerr Wildlife Area, and elsewhere in Texas, have demonstrated that axis, fallow and sika deer can out-compete white-tailed deer. Colorado and Wyoming have had to conduct expensive eradication control measures directed at feral red deer, Barbary sheep and ibex to protect native deer, elk and bighorn sheep populations and their habitats.

Game farmed species that have been free-ranging in Montana include mouflon sheep (eastern and western Montana) and fallow deer (Yellowstone River bottom in the Glendive-Sidney area and the Pryor Mountains). Game farmed species (and hybrids thereof) posing the greatest threat to Montana wildlife from a habitat competition/ degradation standpoint include: chamois, tahr, exotic goats native to Europe and Asia and the Middle East (including ibexes and markhor), Barbary sheep (aoudad), oryx, gemsbok, addax, reedbucks, Rusa deer, Sambar deer, roe deer, wild hogs and javelina.

PROBLEMS PROMPTING THE NEED FOR STATE REGULATION OF GAME FARMS, SOME EXAMPLES:

• In a year's time in Colorado (1990-91), 40% (16 of 41) of the game farms had wild animals enter (mule deer, most commonly); 21% (9 of 41) of big game facilities reported <u>detected</u> escapes; there were at least 2 cases of illegal capture/holding of wild deer or elk; and 5 escaped game farm elk were harvested by hunters. Escaped animals traveled 5-40 miles. These statistics were

documented after the game farm issue was made a high priority by CDW, with additional staff and a substantial budget devoted to game farm monitoring and regulation.

• One of the escaped game farm "elk" shot by hunters in Colorado last year was determined to be a red deer hybrid. The hunter that killed it reported that it was a herd bull with a harem, so it presumably bred a number of wild cow elk while it was free-ranging.

• In Montana, two escaped game farm elk were shot by hunters during the 1991 hunting season, one of which was a suspected red deer hybrid.

• Genetic testing of captive elk herds in Colorado and Alberta revealed 10% (Colorado) to 11% (Alberta) of game farm elk to be red deer hybrids.

• In Colorado, feral populations of ibex, Barbary sheep (aoudad) and mouflon sheep have become established as a result of game farm escapes (Barbary sheep in the Roan Creek area near DeBeque, Barbary sheep, red deer and ibex near the Cathedral Bluffs north of Greeley and mouflon sheep in the Black Canyon of the Gunnison). Mouflon may have hybridized with the Black Canyon bighorn sheep population to an extent to warrant extermination of the entire sheep herd. Last year the Colorado Division of Wildlife estimated that there are in excess of 1,000 exotic animals in the state, approximately 125 of which are free-ranging.

• Control/eradication measures conducted by other states and provinces have proven to be very costly, requiring diversion of considerable sums of money and personnel time from existing wildlife management programs. Eradication of feral populations of exotic animals has proven to be impossible in rugged terrain or heavy vegetative cover. But feral populations have in some cases been confined within a specific geographic area.....at considerable on-going effort and expense.

- New Mexico's Game and Fish Department has controlled Barbary sheep (aoudad) at a cost of $2,500 per animal.
- Colorado reports that efforts to control ibex and aoudad have included an effort that eradicated 8 animals at a cost of $48,000 (charged to a game farmer) and an operation that removed 18 animals at a cost in excess of $65,000.
- Wyoming, even though it bans game farms (except one grandfathered in 1973), is collaborating with Colorado in an expensive eradication program targeting red deer, aoudad and ibex in an area where the two states share a border. Wyoming also had mouflon hybrid sheep in the wild as a result of a trailer wreck in the Wind River canyon.

• Refer to the enforcement issues addendum for a list of problems and infractions that have been documented to date on game farms in Montana.

- Refer to the animal health addendum for a summary of disease concerns pertaining to the game farm industry.

- Refer to the hybridization addendum for a list of hybrid crosses that are known to occur.

- Refer to the prohibited and restricted species addendum for an itemization of species for which importation is prohibited or restricted under provisions of Montana's new game farm rules (adopted May 15, 1992).

ADDENDUM: ENFORCEMENT ISSUES

In conjunction with initiating a rule-making process, the DFWP conducted a statewide inventory of all game farms. During a statewide inspection on March 2, 1992, attention was focused on obtaining a complete inventory of species and numbers of animals present; assessing condition and status of fencing and presence of handling and other game farm facilities, and following up on apparent discrepancies in annual reports submitted to DFWP in January, 1992. Problems and discrepancies that were revealed and documented as a result of a simultaneous inspection of all game farms in the state included:

1) Importation and export of game farm animals without required health inspections.

2) Movement of game farm animals known to be diseased, between game farm operators.

3) Abuse (transfer/re-use) of USDA ear tags: a cross-check between Montana records and those of several other states revealed animals imported as one sex and later exported as the opposite sex; imported as one species and exported as a different species; multiple deaths/rebirths attributed to the same animal, etc.

4) New, unused USDA ear tags in the possession of game farmers (they are to be possessed and applied only by licensed and accredited veterinarians), as well as possession of used ear tags that had been treated and prepared for re-use.

5) Deliberate baiting/trapping of wild animals onto game farms.

6) Fraudulent reporting of numbers and sex of game farm animals. On individual game farms, discrepancies between the number of elk on hand and the number of elk reported or accounted for through bills of sale ranged between 1 and 44. For white-tailed deer and mule deer, the statewide discrepancy between the number of animals on hand and the number accounted for was 63 and 440, respectively.

7) Poor condition/poor maintenance of fences, allowing animals to egress and ingress.

8) Electric fencing inadequate to contain game farm animals or to exclude wildlife. In addition, the power was disconnected at two game farms on the day of the statewide inspection.

9) Multiple use of invoices (duplicate copies) as well as alteration of those invoices (including numbers and sex of animals transported and dates of transactions).

10) Movement of animals between game farms without the required

bills of sale.

11) Unreported escapes of game farm animals.

12) Ingress of wild animals onto game farms.

13) Operation of unlicensed game farms.

14) Theft of game farm animals from one operator by another.

15) Possession of species not included on the operator's game farm license.

16) Failure to submit a copy of the bill of sale (to DFWP) within the required 10 days.

17) Movement of animals between unlicensed and licensed game farm operators.

18) Inaccurate reporting of game farm animals to county assessors for taxation purposes.

19) Inability of game farm operators (or DFWP personnel) to accurately census game farm animals in very large game farm enclosures.

20) Need for some improvements to game farm report forms issued by DFWP.

Follow-up investigation of the foregoing problems and infractions resulted in search warrants being served on July 8, 1992, to 13 game farm operators on 12 game farms. Game farm records and other material evidence were seized at these premises and prosecutions are pending.

ADDENDUM: ANIMAL HEALTH

When animals are moved from one geographic location to another, any parasites or infectious disease agents they harbor are moved with them. Unfortunately, translocation of animals with little or no forethought or precaution has historically been the rule, rather than the exception. Inadvertent transcontinental introductions of parasites and diseases of major significance are well documented, including the following examples:

- introduction of rinderpest from Europe to Africa via domestic cattle.
- introduction of the Echinococcus granulosus tapeworm to various parts of the world via introductions of various species of deer.
- introduction of the large American liver fluke (Fascioloides magna) from North America to Europe via American elk.
- introduction of a protozoan parasite that causes whirling disease from Europe to North America via imported brown trout.
- introduction of two nematode parasites (Camelostrongylus mentulatus and Trichostrongylus probolurus) from India to Texas via blackbuck - (in spite of quarantine procedures).

DISEASES AND PARASITES OF CONCERN WITH REGARD TO GAME FARMING:

Brucellosis (B. abortus): The bovine brucellosis bacteria is passed from infected individuals to other animals through oral contact with aborted fetuses and fetal membranes and fluids. Bison in and around Yellowstone and Grand Teton National Parks carry brucellosis. Elk that make use of winter feeding grounds in Wyoming are also infected, with infection rates on some feed grounds ranging between 16% and 45%. There is concern in Wyoming and Montana about the potential for brucellosis to be transmitted from bison or elk to domestic livestock. The B. abortus bacteria causes undulant fever in humans. Symptoms include recurring fever, muscle and joint aches, headaches and nausea. Undulant fever is usually treatable with antibiotics. Brucellosis in elk is unlikely to be contagious to hunters at the time of the fall hunting season. However, there is potential risk in handling reproductive organs during field dressing. The meat of infected animals is edible and does not pose a health risk to humans.

Brucellosis (B. suis type 4): The B. suis type 4 form of brucellosis is prevalent in free-ranging caribou and herded reindeer populations in Canada, Alaska and Scandinavia. The incidence of sera positive caribou on the Seward peninsula of Alaska is as high as 30%. There is uncertainty as to how it is transmitted. Commonly used field tests (rapid card test and standard plate test) will identify acutely infected individuals but not all chronically infected carriers. Cattle exposed to infected reindeer will sera convert, thereafter testing positive for brucellosis. B. suis type 4 is known to be fatal to moose but it

is not known how exposure would affect mule deer or white-tailed deer. B. suis type 4 can be transmitted to humans and is considered by some to present a more serious threat to human health than B. abortus. Human deaths attributed to B. suis type 4 infections occur most commonly among native peoples in Canada and Alaska.

Tuberculosis (Mycobacterium sp.) Mycobacterium bovis is the most frequently isolated strain of tuberculosis found in hoofed animals. This slow-growing bacterium can be transmitted via respiratory secretions and other body fluids, and can remain viable for a considerable period of time in the environment. Existing Tb testing procedures, developed for domestic livestock, cannot determine with certainty whether or not the disease is present in cervids. Due to limitations of Tb tests for identification of infected individuals, testing is applied on a "whole herd" basis to identify infected herds (a minimum sample size of 200 is recommended by AgCanada). Tb infections are often not visibly apparent in cervids - animals that appear to be perfectly healthy may harbor Tb lesions. This was verified recently in the case of a Tb-infected elk herd on a Colorado game farm. Postmortem examinations revealed gross Tb lesions in healthy-appearing animals, some of which had been harboring Tb for at least 4 years.

Alberta and Ontario are dealing with the aftermath of a major Tb outbreak in captive cervids. In the U.S., Tb has been confirmed in 13 game farm herds as of September 1, 1992, with tissue cultures pending for an additional 13 herds (Dr. Mitchell Essey, USDA, personal communication). To date, Tb testing in Montana has indicated Tb in 5 game farm cervid herds. In Canada, Tb has been transmitted from captive cervids to a cougar, pigs, domestic cats, llama and cattle. The USDA has documented four instances of Tb transmission from game farmed cervids to domestic livestock in the U.S. to date (Pennsylvania, California and 2 in New York). Transmission of Tb from game farmed cervids to domestic livestock has resulted in loss of New York's Tb-free status, with Pennsylvania soon to follow (Dr. Frye, USDA, personal communication).

Transmission of Tb to free-ranging wildlife populations would be a catastrophe. Efforts to control it, to protect wildlife resources and the state's livestock industry, would be very expensive and likely, futile. Examples of known, persistent "reservoir" wildlife species, that in other parts of the world have precluded eradication of Tb from free-ranging wildlife, captive wildlife and domestic livestock, include the Asian water buffalo in Australia, the brush-tailed opossum in New Zealand, European badgers in Europe and cape buffalo in Africa. Expensive eradication/control programs targeting reservoir wildlife species have proven universally to be unsuccessful. New Zealand is a good example. Even though infection rates have been reduced as a result of a multi-million dollar Tb eradication program, Tb persists in 50% of captive red, fallow and sika deer herds and in free-ranging deer herds occupying a third of the country's land area.

Bovine tuberculosis poses a substantial human health threat. If Montana wildlife populations were to be infected with Tb, hunting and other wildlife-related recreational activities that are currently public assets would be transformed into human health hazards.

Johne's Disease (*Mycobacterium paratuberculosis*): The slow-growing bacterium, *M. paratuberculosis*, causes enteritis in domestic livestock and wild ruminants. It is spread in the feces of infected animals and may persist in the environment for several months. While it can be fatal, it is not apparent in many infected animals. Johne's disease is very difficult to diagnose in live animals (and difficult to distinguish from Tb) and has proven to be virtually impossible to eradicate or control in the wild. In all cases where it has been documented in free-ranging wildlife, association with infected livestock has appeared to be the source of infection. However, it has been demonstrated that once a wildlife population is infected, it can serve as a reservoir for the disease, dispersing and maintaining the bacteria indefinitely (as is the case with Tule elk at Point Reyes National Seashore, California).

Meningeal worm (*Parelaphostrongylus tenuis*) is carried by white-tailed deer and is prevalent in the eastern U.S. (E. of the 100th meridian - as far west as Manitoba and eastern N. Dakota). The prevalence of infection in white-tailed deer populations in the eastern U.S. varies widely but exceeds 90% in some areas. *P. tenuis* larvae are resistant to freezing and desiccation in the environment. The arid great plains is credited as serving as a natural geographic barrier that has historically excluded this parasite from the western U.S. The adult meningeal worm is normally found in the meningeal covering of the brain in white-tailed deer. The larvae are shed in the feces of their host. After penetrating land snails or slugs the larvae are able to complete their life cycle when the infected snail is ingested by a suitable host. The larvae develop into subadult worms that migrate to the brain where they mature and produce larvae. With ingestion of a single infected snail, a white-tailed deer, becomes a prolific meningeal worm "factory", dispersing larvae in the environment. There is no definitive test for detecting the presence of this parasite in ungulates, nor is there a means to treat an infected individual or infected population.

As the natural host to meningeal worm, whitetailed deer exhibit no symptoms of infection. However, meningeal worm causes debilitating - and usually fatal - neurologic disease in other native North American cervids, many exotic ruminants and several domestic ruminants. Recent research in Alberta has verified that some elk can survive meningeal worm infections and shed larvae -- intermittently and generally in lower numbers than whitetails (Samuel et al. 1992). Research in Canada has shown the traditional Baermann technique to be less than 35% effective in detecting meningeal worm infection in elk.

Fatal meningeal worm infections have been reported for all cervid species native to North America (moose, caribou, elk, mule deer, black-tailed deer, white-tailed deer and pronghorn antelope) as well as several exotic species (fallow deer, eland and sable antelope) (Pybus 1991). Published reports of meningeal worm infection in domestic livestock exist for sheep (Connecticut, Minnesota, New Hampshire, New York and West Virginia), goats (Michigan, New York and Texas) and llamas (Minnesota, Ohio, Texas and Virginia) (SCWDS Briefs). Domestic cattle have not been shown to be susceptible to infection.

The threat of introducing meningeal worm prompted the province of Alberta to close its borders to importation of all ungulates in September, 1988. British Columbia followed suit in May 1991, by banning importation of elk, moose, white-tailed deer and mule deer.

Tissue worm (*Elaphostrongylus cervi*): is a close relative to meningeal worm. It is not native to North America but is prevalent in Scandinavia and New Zealand. The worm occurs in muscle tissue as well as in the central nervous system and causes neurological symptoms similar to those characteristic of meningeal worm. Tissue worm has been translocated in reindeer from Scandinavia to an island off New Foundland. The reindeer didn't survive but the tissue worm parasite persisted in native caribou populations. Red deer and alpacas recently imported to Canada from New Zealand were found to be infected with tissue worm. Introduction of tissue worm is considered as great a potential threat to wildlife and domestic livestock as introduction of meningeal worm. Alberta recently banned importation of alpacas and llamas to prevent introduction of *E. cervi* into the province.

Malignant catarrhal fever (MCF) : there are two known forms of this sporadic, fatal disease of ruminants and cattle. The form that occurs in the wildebeest family is caused by a herpes virus. The virus responsible for the form that occurs in domestic sheep has not been identified but can be diagnosed through a serum test. There is not a lot known about transmission of MCF. It appears that the virus is shed in the respiratory secretions of calves and lambs. While the virus does not affect its host, it is fatal to other exposed cervids and livestock. Outbreaks of MCF in native cervids, though uncommon, are typically seen in captive herds, under crowded conditions. Game farmed species such as axis deer, sika deer, red deer, blackbuck antelope and bison are susceptible, as well as the native cervid species. The potential for virus transmission is enhanced by proximity to sheep or members of the wildebeest subfamily (wildebeest, topi, hartebeest and blesbok). A recent documented case of MCF in game farmed ruminants occurred in December 1991 and involved captive WT deer in Alabama (SCDWS Briefs).

Pseudorabies (PRV): is a viral disease of swine that causes abortion in sows and fatal illness in newborn pigs. Older swine do not show symptoms but can become lifetime carriers. Cattle, sheep,

dogs, cats, raccoons, foxes, and small mammals can become infected and die suddenly of virus-induced nerve and brain damage. Surveys conducted by SCWDS and other researchers have revealed that wild swine commonly harbor PRV. Pseudorabies in wild hogs has been documented in 12 states: Alabama, Arkansas, California, Florida, Georgia, Hawaii, Louisiana, Missouri, Mississippi, Oklahoma, South Carolina and Texas (SCWDS Briefs).

Besnoitosis: is caused by a protozoan parasite found in the bones, tendons and fascia (just under the skin) of the legs and face of infected caribou and reindeer. Post mortem examinations indicate that 21% to 23% of caribou in British Columbia are infected with the North American form of the parasite (Besnoitea tarandi) (Dr. Ron Lewis, personal communication). The Old World form (Besnoitea benwadi) occurs in cattle, goats, sheep and antelope in Africa, the Middle East, Eastern Europe and sporadically in Western Europe. Neither the life cycle of the parasite or the means by which it is transmitted are well understood. Recent research in France suggests that biting flies may play a role. Severe cases of the disease are manifest in sloughing of the skin from the infected animal's head and legs. Although besnoitosis does not cause serious health problems in caribou and reindeer, it proved to be fatal to deer species housed near infected reindeer in the Winnipeg zoo. Deer mortality from besnoitosis has also occurred at a wildlife park located near Moose Jaw, Saskatchewan. Musk oxen are also known to be susceptible. The North American form of besnoitosis has not been shown to be infective to domestic cattle.

Other Diseases of Concern: There are a number of diseases that have been identified in wildlife only recently such as chronic wasting disease, bovine spongiform encephalopathy (BSE), dermatophilosis and poxviral dermatitis. In addition to the more well-known diseases itemized above, participants in the January 1991 Game Farming Symposium in Boise Idaho identified the following diseases of concern associated with game ranching/farming of cloven-hoofed animals: Brucella ovis, orbiviruses (bluetongue and epizootic hemorrhagic disease), pseudorabies, spongiform encephalopathies (scrapie, bovine spongiform encephalopathy, chronic wasting disease), arterial worm (Elaeophora schneideri) and ectoparasites such as ticks, mites and lice. Participants in this symposium recommended that all game farm animals be examined for evidence of all of the above diseases prior to being cleared for importation to any state or province.

During the course of providing the foregoing information on animal diseases and parasites, recognized experts in the animal health field expressed worry that comparatively little is known about diseases of wildlife species, especially species that are not indigenous to North America. This is in contrast to a substantial accumulation of knowledge and experience concerning diseases of domestic livestock species - as well as proven technology to test

and treat domestic livestock. There are many as-yet-unknown health ramifications of confining animal species that are not accustomed to crowding, mingling of species that have never before come into contact, and translocation of animals from one geographic area to another. The animal health experts we talked with advocate caution on the part of wildlife managers and veterinarians, urging that we maintain the same level of concern and caution for what is <u>not yet known</u> about animal health issues related to game farming, as we do for the animal health concerns that we <u>currently do know</u> something about.

ADDENDUM: HYBRIDIZATION

Occurrence of the following hybrid crosses has been documented:

ELK X RED DEER - Common in New Zealand and on many North American game farms. Free-ranging red deer and elk have hybridized extensively in New Zealand (Harrington 1985, Challies 1985, Short 1985). Elk and red deer have been intentionally hybridized on New Zealand game farms to produce "megareds". Genetic screening of captive elk in Colorado revealed evidence of red deer hybridization in 13 of 21 game farm herds (10% of the individuals tested). Genetic testing of game farmed elk in Alberta indicated that 11% are/were hybrids. The genetic testing laboratories in the U.S. and Canada report that blood samples submitted to them for genetic testing are running between 10% and 18% positive for evidence of red deer hybridization.

RED DEER X SIKA DEER - Free-ranging red and sika deer in Ireland have hybridized to the extent that it is now believed that no pure individuals of either species remain (Harrington 1985, Ratcliffe 1987).

ELK X SIKA DEER - Some game farmers in the U.S. are crossing sika deer and elk to produce an "American sika deer" (5/8 elk and 3/8 Asian sika deer). Use of these American sika deer as herd sires is promoted as a way for game farmers to "upgrade" their Japanese sika deer herds to elk-size hybrids.

RED DEER X SIKA DEER X ELK - At the center of a recent court case in Wyoming were 12 red deer/sika deer/elk hybrids that an individual imported into Wyoming. They produced fertile offspring.

MOUFLON X BIGHORN SHEEP - Hybridize readily and produce fertile offspring.

AXIS X RED DEER - Produce fertile offspring

AXIS X WHITE TAILED DEER - Hybridization known to occur in penned situations.

ADDENDUM: GENERA AND/OR SPECIES FOR WHICH IMPORTATION INTO MONTANA IS PROHIBITED OR RESTRICTED UNDER PROVISIONS OF THE NEW GAME FARM RULES:

1) In the family Bovidae: all members of the following genera and hybrids thereof:

Subfamily Caprinae: the following genera are hardy, prolific, aggressive competitors, innate dispersers and difficult to effectively contain. Due to the potential for competition with native wildlife species and hybridization with native sheep and goats, importation of the following genera is prohibited:

- Rudicapra (chamois) Mountains of C. and S. Europe & Asia Minor. Natural dispersers; capable of clearing 12' fences; potential for habitat competition.

- Hemitragus (tahr) Himalayas, Oman and mtns. of S. India. A mountain species with same niche as the North American mountain goat - potential for habitat competition. Difficult to contain - a notorious jumper.

- Capra (goats and ibexes native to Europe, Asia Minor & Middle East - excluding domestic goats, Capra hircus). Ibex native to European Alps, Afghanistan, N. India & N. Ethiopia. Potential for habitat competition. Difficult to contain: the ibex is a notorious jumper that can clear 12' fences. Markhor goats can jump 8'. In addition to being notorious jumpers, members of the genus Capra are adept climbers. They may scale fences and corner sections where support structures exist. They are hardy, capable of moving long distances, adaptable to a wide range of environments, and survive well in the wild.

- Ammotragus (Barbary sheep or aoudad) Mtns. of Morocco & W. Sahara to Egypt & Sudan. Natural dispersers and difficult to contain (can clear 8' fences). They are very aggressive and prolific (can produce 4 young per year). Potential for habitat competition: out-compete both bighorn sheep and mule deer. In addition to forage competition, they exhibit aggressive behavior and are known to drive deer from bedding sites, exclude other ungulates from water sources and prevent bighorn rams from successfully breeding by herding the ewes. In Col., 76% carry pasteurella. Barbary sheep have also been shown to carry bluetongue, infectious bovine rhinotrachetis and epizootic hemorrhagic disease.

- Ovis (only the mouflon species, Ovis musimon) Corsica, Sardinia & Cyprus. Readily hybridizes with

bighorn sheep, producing fertile offspring. Do well in the wild.

Subfamily Hippotraginae: Oryx and Addax are plains animals. Primary concern is potential habitat competition with native species. Disease transmission is also a concern.

- Orvx (oryx and gemsbok) Morocco-Egypt; Arabia, Ethiopia & S. Africa. Very aggressive - even known to kill elk. Feral oryx are a big problem in N. Mexico.
- Addax (addax) W. Sahara, Egypt & Sudan.

Subfamily Reduncinae:

- Redunca (reedbucks) Africa. A short grass grazer. Potential for habitat competition with WT deer and antelope. Females very similar in appearance to female WT deer - to eradicate, have to shoot out WTs as well.

Subfamily Alcelaphnae: Plains species that are carriers of malignant catarrhal fever.

- Connochaetes (wildebeests)
- Alcelaphus (hartebeests)
- Damaliscus (sassabies: blesbok, bontebok, topi)

2) The following species in the family Cervidae (and hybrids thereof), due to the potential for hybridization, transmission of diseases and parasites, and habitat competition/degradation. Hybridization is fairly common among members of the deer family, particularly within the genus Cervus (Harrington 1985, Short 1985, Gray 1972). Exotic species in the genus Cervidae have transmitted exotic parasites to moose in the NE U.S. and to white-tailed deer in Texas. Members of the Cervidae family readily become feral, are difficult or impossible to eradicate once they are free-ranging, and exotic species are characteristically aggressive competitors with native wildlife species:

- moose (Alces alces) Parasite concerns, primarily meningeal worm and liver flukes.

- All Red Deer (Cervus elaphus), and crosses with North American elk (including C. e. canadensis, roosevelti, manitobensis, nannodes, and nelsoni). Red deer and red deer hybrids may be difficult to distinguish from elk, readily become feral, are very aggressive breeders and readily hybridize with North American elk.

- axis deer (Axis axis) India, Nepal, Sri Lanka. Can adapt well to both wet and dry climates and can out-compete WT deer. Known to hybridize with red deer and

white-tailed deer.

- Rusa deer (Cervus timorensis) Java, Celebes, Timor, Moluccas & associated islands.

- Sambar deer (Cervus unicolor) India to SE China, Malay Peninsula and associated islands.

- Sika deer (Cervus nippon) SE Siberia, China, Japan, Korea, Manchuria. There are 9 subspecies, the smaller Japanese variety being the most prevalent on game farms in the U.S. Some of the Asian mainland subspecies are larger than the island subspecies, approaching the size of red deer and American elk. Some states (including Texas) consider the sika to be the most difficult exotic species to control once it becomes feral - attempts to eradicate them have been futile. Sika deer are very hardy and when subject to control measures they become very secretive, to the point of becoming nocturnal. Sika deer have been shown to out-compete white-tailed deer and fertile offspring are produced when they are crossed with red deer or elk.

- Roe deer (Capreolus capreolus and C. pygarus) Eurasia. People who have worked with these species believe that feral roe deer, due to their size, behavior and adaptability, would be as difficult as sika deer to eradicate or control.

3) All wild species in the family Suidae (Russian boar, European boar) and hybrids thereof. Concerns include pseudorabies and habitat competition/degradation - including detrimental impacts to ground nesting birds. Feral hogs are a serious problem in California, where they now number well in excess of 100,000.

The U.S. Animal Health Association adopted a resolution in November, 1991 recommending that states that do not currently have feral hogs, consider banning them as 15 states already have. This resolution was prompted by the October 1991 escape of a herd of hogs in Minnesota. Based on experience of other states, they cannot be kept in confinement, are capable of doing enormous damage to vegetation and other wildlife populations (including small mammals and ground nesting birds such as turkeys) and cannot be eliminated once they become established in the wild. There are currently 23 states that do have feral hogs and 27 that do not (including Montana).

4) In the family Tayassuidae, the collared peccary (javelina) (Tayassu tajacu) and hybrids thereof. Same concerns as those itemized for the Suidae family.

The following species have been designated in the new rules as "restricted species", on the basis of specific animal health risks they pose to wildlife and/or domestic livestock:

- white-tailed deer (Odocoileus virginianus). Carrier of meningeal worm. Importation of white-tailed deer into Montana is allowed only for game farms currently licensed for white-tailed deer and which currently possess white-tailed deer. The only white-tailed deer that may be permitted entry are those originating from states west of the 100th meridian (where meningeal worm is not endemic) and which meet specific testing protocol outlined in the rules. This provision allows game farmers currently raising white-tailed deer to obtain breeding stock needed to avoid inbreeding.

- caribou (reindeer) (Rangifer sp.). Due to genetic concerns associated with the MT/ID interstate caribou population and concern about potential transmission of Brucella suis type 4 to native moose, deer and elk populations and humans, importation of reindeer into Montana will be allowed only under the following conditions: 1) all animals in the shipment originate in a herd located south of the Canada/U.S. border that is certified brucellosis-free (both B. suis and B. abortus) and tuberculosis-free, as determined by whole-herd testing, and 2) the destination of these animals is not located west of the continental divide.

  Canadian researchers working with free-ranging reindeer and caribou have recently reported finding blood titers indicative of unidentified herpes viruses. Due to the immunosuppressive effects of such viruses, there is concern about the potential for additional, unknown health risks that reindeer and caribou may pose to wildlife and cattle.

APPENDIX F

APPENDIX F. PARTIAL LIST OF ANNUAL ELK SURVEYS CONDUCTED IN HUNTING DISTRICT SURROUNDING THE HELENA AREA*

HD	YEAR	TOTAL	BIOLOGIST
215	1994	517(P)	D. HOOK
	1993	639(P)	D. HOOK
	1992	1004	D. HOOK
	1988	1161	D. HOOK
	1986	1051	L. NIELSON
	1980	442	L. NIELSON
280	1994	0	NO WINTERING ELK
281	1994	773	B. HENDERSON
	1988	303	B. HENDERSON
	1986	252	B. HENDERSON
	1983	209	F. HARTKORN
	1965	141	F. HARTKORN
282	1994	646	B. HENDERSON
	1993	592	B. HENDERSON
	1992	652	B. HENDERSON
	1991	832	B. HENDERSON
	1985	587	B. HENDERSON
	1983	425	F. HARTKORN
	1975	282	F. HARTKORN
283	1993	456	B. HENDERSON
	1989	124	B. HENDERSON
	1984	84	B. HENDERSON
	1970	17	F. HARTKORN
	1965	36	F. HARTKORN
	1958	145	F. HARTKORN
285	1994	256	B. HENDERSON
	1993	135	B. HENDERSON
	1992	395	B. HENDERSON
	1991	257	B. HENDERSON
	1989	314	B. HENDERSON
	1983	231	F. HARTKORN
	1966	17	F. HARTKORN
291	1994	500	D. HOOK
292	1994	900	D. HOOK
293	1994	1348	D. HOOKS
	1993	1091	D. HOOKS
	1992	670	D. HOOKS
	1988	795	D. HOOKS
	1987	703	L. NIELSON
	1985	762	L. NIELSON
	1980	181(P)	L. NIELSON
421	1994	200	J. MCCARTHY
422	1994	450	J. MCCARTHY
423	1994	450	J. MCCARTHY
445	1994	600	G. TAYLOR
	1991	1114	F. FIEST
446	1994	1000	D. BUCSIS
	1989	772	D. BUCSIS
	1988	736	D. BUCSIS
455	1994	1560	G. TAYLOR
	1991	691	G. TAYLOR
	1990	1164	G. TAYLOR
	1989	1249	F. FIEST

(CONTINUED)

HD	YEAR	TOTAL	BIOLOGIST
818	1994	185	G. JOSLIN
	1993	391	G. JOSLIN
	1991	528	G. JOSLIN
	1990	416	M. FRISINA
	1989	366	M. FRISINA
	1988	400	M. FRISINA
	1987	166	M. FRISINA
835	1994	847	G. JOSLIN
	1993	1056	G. JOSLIN
	1992	816	G. JOSLIN
	1991	117	G. JOSLIN
	1990	640	G. JOSLIN
	1989	798	G. JOSLIN
	1988	550	G. JOSLIN
	1987	250	G. JOSLIN
	1986	350	G. JOSLIN
	1985	173	C. CONSTAN
	1982	246	C. CONSTAN
839	1993	835	G. JOSLIN
	1992	774	G. JOSLIN
	1991	700	G. JOSLIN
	1989	660	G. JOSLIN
	1988	267	G. JOSLIN
	1987	52	G. JOSLIN
	1979	140	F. FIEST
	1978	89	F. FIEST
	1975	72	F. FIEST
	1973	35	F. FIEST
843	1994	590	G. JOSLIN
	1993	836	G. JOSLIN
	1992	501	G. JOSLIN
	1991	395	G. JOSLIN
	1990	570	G. JOSLIN
	1989	629	G. JOSLIN
	1988	335	G. JOSLIN
	1987	181	G. JOSLIN
	1985	340	G. JOSLIN
	1979	325	F. FIEST
	1978	259	F. FIEST
	1975	131	F. FIEST
	1973	415	F. FIEST
850	1994	500	T. CARLSON
870	1994	500	T. CARLSON
880	1992	1998	T. CARLSON
	1991	2059	R. DESIMONE
	1989	3268	R. DESIMONE
	19986	3443	R. DESIMONE
	1984	3320	R. DESIMONE
	1982	1704	R. DESIMONE
891	1994	466	T. CARLSON
	1990	559	T. CARLSON
	1984	146	J. HERBERT
892	1994	1116	T. CARLSON
	1991	1055	T. CARLSON
	1985	875	J. HERBERT
	1984	466	J. HERBERT
	1974	377	D. CHILDRESS

* BASIS FOR DISTRIBUTION MAP. (P) = PARTIAL SURVEY

APPENDIX G



MONTANA NATURAL HERITAGE PROGRAM
1515 East Sixth Avenue
P.O. Box 201800
Helena, Montana 59620-1800
(406) 444-3009

EXPLANATION OF VERTEBRATE SPECIES LISTS

The Vertebrate Species List is generated from the Vertebrate Characterization Abstract database (VCA), compiled by the Montana Natural Heritage Program. This database contains records on 620 vertebrate species found in Montana and includes detailed information on the distribution, taxonomy, phenology, and habitat of these species.

The Vertebrate Species List summarizes a portion of the distribution data maintained in the VCA. Extensive additional information is available for most of these species. The VCA database allows information to be sorted by shared characteristics such as location, habitat type, status, food habits, or activity patterns. Comment fields contain detailed information on migration, foods, reproduction and development, species ecology, activity, range, and habitat. Each record is also linked to fully-cited and abstracted reference sources.

* * *

Certain codes and abbreviations are used in this report. Although most of these are very straightforward, the following field-by-field explanation should answer most questions.

Name: Plant and animal scientific names consisting of genus and species, with subspecific or varietal names if applicable. Plant associations and community types that existed in the pre-settlement landscape of Montana are named using the scientific names of dominant overstory and understory species.

Common name: Common name of species or community, often as given in regional floras and field guides.

Global rank and State rank: Elements are evaluated and ranked by the Heritage Program on the basis of their global (range-wide) status, and their state-wide status. These ranks are used to determine protection and data collection priorities, and are revised as new information becomes available.

A scale of 1 (critically imperiled) to 5 (demonstrably secure) is used for these ranks, and each species is assigned the appropriate combination of global and state ranks.

Example: common loon = G5 / S3 (i.e., species is demonstrably secure globally; in Montana is found within a restricted range).

Global and state ranks are assigned according to a standardized procedure used by all Natural Heritage Programs, and are defined below.

Global/State Rank		Definition (G = Range-wide; S = Montana)
G1	S1	Critically imperiled because of extreme rarity (5 or fewer occurrences, or very few remaining individuals), or because of some factor of its biology making it especially vulnerable to extinction.
G2	S2	Imperiled because of rarity (6 to 20 occurrences), or because of other factors demonstrably making it very vulnerable to extinction throughout its range.
G3	S3	Either very rare and local throughout its range, or found locally (even abundantly at some of its locations) in a restricted range, or vulnerable to extinction throughout its range because of other factors; in the range of 21 to 100 occurrences.
G4	S4	Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.
G5	S5	Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.
GU	SU	Possibly in peril, but status uncertain; more information needed.
GH	SH	Historically known; may be rediscovered.
GX	SX	Believed to be extinct; historical records only, continue search.

Other codes:

A	Accidental in the state; including species (usually birds or butterflies) recorded very infrequently, hundreds or thousands of miles outside their usual range.
B	A state rank modifier indicating breeding status for a migratory species.
E	An exotic established in the state; may be native in nearby regions.
N	A state rank modifier indicating non-breeding status for a migratory species.
Q	Taxonomic questions or problems involved, more information needed; appended to the global rank.
R	Reported in the state; but lacking documentation which would provide a basis for either accepting or rejecting the

report.

T — Rank for a subspecific taxon (subspecies or variety); appended to the global rank for the full species.

Z — Ranking not applicable.

State Status: These symbols give the state legal status of vertebrates as listed in the 1989 Statutes of Montana for the Department of Fish, Wildlife and Parks.

GA = game animal
GF = game fish
FB = fur bearing animal
MB = migratory bird
UB = upland game bird
E = endangered
NG = nongame wildlife
P = protected species
U = unprotected species

Management Status:

CD = closed season
RH = restricted harvest

USF&WS (USESA) Status: The symbols in this column denote the categories defined in the U.S. Fish and Wildlife Service Notices of Review (1980, 1983, 1985, 1990), and indicate the status of a taxon with respect to the federal Endangered Species Act of 1973:

LE — Endangered

LT — Threatened

P — Proposed E or T

C1 — Notice of Review, Category 1 (substantial biological information on file to support the appropriateness of proposing to list as endangered or threatened).

C2 — Notice of Review, Category 2 (current information indicates that proposing to list as endangered or threatened is possibly appropriate, but substantial biological information is not on file to support an immediate ruling).

C2* — Category 2, and the taxon is possibly extinct.

3A — Taxa for which the USFWS has persuasive evidence of extinction.

3B — Names that, on the basis of current taxonomic understanding, do not represent taxa meeting the Endangered Species Act's definition of "species."

3C — Taxa that have proven to be more abundant or widespread than was previously believed, and/or those that are not subject to any identifiable threat.

NL — Not listed/no designation. (See note below.)

Note: A species can have more than one federal designation if the species' status varies within its range. In these instances the Montana designation is listed first.

Examples: bald eagle = LELT. Species is Listed Endangered in Montana; elsewhere in its range it may be Listed Threatened.

cutthroat trout = C2NL. Species is a Category 2 in Montana; elsewhere in its range it may not have USF&WS designation.

fisher = NLC2. Species has no USF&WS designation in Montana; elsewhere in its range it may be a Category 2.

USFS Status: The status of species in Montana as defined by the U.S. Forest Service manual (2670.22). These taxa are listed as such by the Regional Forester (Northern Region) on Montana National Forests.

* * *

If you have questions about this report, or about any of the other databases maintained by the Montana Natural Heritage Program, or would like to request a Vertebrate Characterization Abstract for any of these species, please contact us.

MONTANA NATURAL HERITAGE PROGRAM
State Library Building
1515 East Sixth Avenue
Helena, Montana 59620
(406) 444-3009

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
Amphibians					
AMBYSTOMA MACRODACTYLUM LONG-TOED SALAMANDER	G5	S5	NG		
BUFO BOREAS WESTERN TOAD	G4	S4	NG		
PSEUDACRIS TRISERIATA WESTERN CHORUS FROG	G5	S5	NG		
SCAPHIOPUS BOMBIFRONS PLAINS SPADEFOOT	G5	S4?	NG		
RANA PIPIENS NORTHERN LEOPARD FROG	G5	S4	NG		
RANA PRETIOSA SPOTTED FROG	G4	S4	NG	C2C1	
Birds					
GAVIA IMMER COMMON LOON	G5	S3B,SZN	P		SENSITIVE
PODILYMBUS PODICEPS PIED-BILLED GREBE	G5	S5B,SZN	P		
PODICEPS AURITUS HORNED GREBE	G5	S4B,SZN	P		
PODICEPS GRISEGENA RED-NECKED GREBE	G5	S4B,SZN	P		
PODICEPS NIGRICOLLIS EARED GREBE	G5	S5B,SZN	P		
AECHMOPHORUS OCCIDENTALIS WESTERN GREBE	G5	S4B,SZN	P		
PELECANUS ERYTHRORHYNCHOS AMERICAN WHITE PELICAN	G3	S2B,SZN	P		
PHALACROCORAX AURITUS DOUBLE-CRESTED CORMORANT	G5	S5B,SZN	P		
BOTAURUS LENTIGINOSUS AMERICAN BITTERN	G4	S4B,SZN	P		
ARDEA HERODIAS GREAT BLUE HERON	G5	S5B,SZN	P		
CASMERODIUS ALBUS GREAT EGRET	G5	SAN	P		
EGRETTA THULA SNOWY EGRET	G5	SAB,SZN	P		
BUTORIDES VIRESCENS GREEN HERON	G5	SAN	P		
NYCTICORAX NYCTICORAX BLACK-CROWNED NIGHT-HERON	G5	S3B,SZN	P		
PLEGADIS CHIHI WHITE-FACED IBIS	G5	S2B,SZN	P	C2	
CYGNUS COLUMBIANUS TUNDRA SWAN	G5	SZN	MB		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
CYGNUS BUCCINATOR TRUMPETER SWAN	G4	S1N,S2B	MB	C2NL	SENSITIVE
CYGNUS OLOR MUTE SWAN	G5	SE	?		
ANSER ALBIFRONS GREATER WHITE-FRONTED GOOSE	G5	SZN	MB		
CHEN CAERULESCENS SNOW GOOSE	G5	S4N	MB		
CHEN ROSSII ROSS' GOOSE	G4	S4N	MB		
BRANTA CANADENSIS CANADA GOOSE	G5	S5B,SZN	MB		
AIX SPONSA WOOD DUCK	G5	S5B,SZN	MB		
ANAS CRECCA GREEN-WINGED TEAL	G5	S5B,SZN	MB		
ANAS RUBRIPES AMERICAN BLACK DUCK	G4	SAN	MB		
ANAS PLATYRHYNCHOS MALLARD	G5	S5B,S5N	MB		
ANAS ACUTA NORTHERN PINTAIL	G5	S5B,SZN	MB		
ANAS DISCORS BLUE-WINGED TEAL	G5	S5B,SZN	MB		
ANAS CYANOPTERA CINNAMON TEAL	G5	S5B,SZN	MB		
ANAS CLYPEATA NORTHERN SHOVELER	G5	S5B,SZN	MB		
ANAS STREPERA GADWALL	G5	S5B,SZN	MB		
ANAS AMERICANA AMERICAN WIGEON	G5	S5B,SZN	MB		
AYTHYA VALISINERIA CANVASBACK	G5	S5B,SZN	MB		
AYTHYA AMERICANA REDHEAD	G5	S5B,SZN	MB		
AYTHYA COLLARIS RING-NECKED DUCK	G5	S5B,SZN	MB		
AYTHYA MARILA GREATER SCAUP	G5	SAN	MB		
AYTHYA AFFINIS LESSER SCAUP	G5	S5B,SZN	MB		
HISTRIONICUS HISTRIONICUS HARLEQUIN DUCK	G5	S2B,SZN	MB	C2	SENSITIVE
CLANGULA HYEMALIS OLDSQUAW	G5	SAN	MB		
MELANITTA PERSPICILLATA SURF SCOTER	G5	SAN	MB		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
MELANITTA FUSCA WHITE-WINGED SCOTER	G5	SAN	MB		
BUCEPHALA CLANGULA COMMON GOLDENEYE	G5	S5B,S5N	MB		
BUCEPHALA ISLANDICA BARROW'S GOLDENEYE	G5	S5B,SZN	MB		
BUCEPHALA ALBEOLA BUFFLEHEAD	G5	S5B,SZN	MB		
LOPHODYTES CUCULLATUS HOODED MERGANSER	G5	S4B,SZN	MB		
MERGUS MERGANSER COMMON MERGANSER	G5	S5B,SZN	MB		
MERGUS SERRATOR RED-BREASTED MERGANSER	G5	SZN	MB		
OXYURA JAMAICENSIS RUDDY DUCK	G5	S5B,SZN	MB		
CATHARTES AURA TURKEY VULTURE	G5	S4B,SZN	P		
PANDION HALIAETUS OSPREY	G5	S5B,SZN	P		
HALIAEETUS LEUCOCEPHALUS BALD EAGLE	G3	S3B,S3N	P	LELT	ENDANGERED
CIRCUS CYANEUS NORTHERN HARRIER	G5	S4B,SZN	P		
ACCIPITER STRIATUS SHARP-SHINNED HAWK	G5	S4B,SZN	P		
ACCIPITER COOPERII COOPER'S HAWK	G4	S4B,SZN	P		
ACCIPITER GENTILIS NORTHERN GOSHAWK	G4	S4	P	C2	
BUTEO SWAINSONI SWAINSON'S HAWK	G4	S5B,SZN	P		
BUTEO JAMAICENSIS RED-TAILED HAWK	G5	S5B,SZN	P		
BUTEO REGALIS FERRUGINOUS HAWK	G4	S3B,SZN	P	C2	SENSITIVE
BUTEO LAGOPUS ROUGH-LEGGED HAWK	G5	S5N	P		
AQUILA CHRYSAETOS GOLDEN EAGLE	G4	S4	P		
FALCO SPARVERIUS AMERICAN KESTREL	G5	S5B,SZN	P		
FALCO COLUMBARIUS MERLIN	G4	S4	P		
FALCO PEREGRINUS PEREGRINE FALCON	G3	S1S2B,SZN	E	E/SA	ENDANGERED
FALCO RUSTICOLUS GYRFALCON	G5	SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
FALCO MEXICANUS PRAIRIE FALCON	G5	S4	P		
PERDIX PERDIX GRAY PARTRIDGE	G5	SE4	UB		
ALECTORIS CHUKAR CHUKAR	G5	SE4	UB		
PHASIANUS COLCHICUS RING-NECKED PHEASANT	G5	SE5	UB		
DENDRAGAPUS CANADENSIS SPRUCE GROUSE	G5	S4	UB		
DENDRAGAPUS OBSCURUS BLUE GROUSE	G5	S5	UB		
LAGOPUS LEUCURUS WHITE-TAILED PTARMIGAN	G5	S3	UBCS		
BONASA UMBELLUS RUFFED GROUSE	G5	S5	UB		
CENTROCERCUS UROPHASIANUS SAGE GROUSE	G5	S5	UB		
TYMPANUCHUS PHASIANELLUS SHARP-TAILED GROUSE	G4	S4	UB		SENSITIVE
MELEAGRIS GALLOPAVO WILD TURKEY	G5	SE5	UB		
RALLUS LIMICOLA VIRGINIA RAIL	G5	S5B,SZN	MBCS		
PORZANA CAROLINA SORA	G5	S5B,SZN	MBCS		
FULICA AMERICANA AMERICAN COOT	G5	S5B,SZN	MB		
GRUS CANADENSIS SANDHILL CRANE	G5	S2N,S5B	MB		
GRUS AMERICANA WHOOPING CRANE	G1	SZN	E	LE	ENDANGERED
PLUVIALIS SQUATAROLA BLACK-BELLIED PLOVER	G5	SZN	P		
PLUVIALIS DOMINICA AMERICAN GOLDEN-PLOVER	G5	SZN	P		
CHARADRIUS SEMIPALMATUS SEMIPALMATED PLOVER	G5	SZN	P		
CHARADRIUS MELODUS PIPING PLOVER	G3	S2B,SZN	P	LTLE	THREATENED
CHARADRIUS VOCIFERUS KILLDEER	G5	S5B,SZN	P		
CHARADRIUS MONTANUS MOUNTAIN PLOVER	G3	S2B,SZN	P	C2	SENSITIVE
HIMANTOPUS MEXICANUS BLACK-NECKED STILT	G5	S3B,SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
RECURVIROSTRA AMERICANA AMERICAN AVOCET	G5	S5B,SZN	P		
TRINGA MELANOLEUCA GREATER YELLOWLEGS	G5	SZN	P		
TRINGA FLAVIPES LESSER YELLOWLEGS	G5	SZN	P		
TRINGA SOLITARIA SOLITARY SANDPIPER	G5	SZN	P		
CATOPTROPHORUS SEMIPALMATUS WILLET	G5	S5B,SZN	P		
ACTITIS MACULARIA SPOTTED SANDPIPER	G5	S5B,SZN	P		
BARTRAMIA LONGICAUDA UPLAND SANDPIPER	G5	S4B,SZN	P		
NUMENIUS PHAEOPUS WHIMBREL	G5	SZN	P		
NUMENIUS AMERICANUS LONG-BILLED CURLEW	G5	S4B,SZN	P	3C	
LIMOSA FEDOA MARBLED GODWIT	G5	S4B,SZN	P		
ARENARIA INTERPRES RUDDY TURNSTONE	G5	SZN	P		
CALIDRIS ALBA SANDERLING	G5	SZN	P		
CALIDRIS PUSILLA SEMIPALMATED SANDPIPER	G5	SZN	P		
CALIDRIS MAURI WESTERN SANDPIPER	G5	SZN	P		
CALIDRIS MINUTILLA LEAST SANDPIPER	G5	SZN	P		
CALIDRIS BAIRDII BAIRD'S SANDPIPER	G4	SZN	P		
CALIDRIS MELANOTOS PECTORAL SANDPIPER	G5	SZN	P		
CALIDRIS ALPINA DUNLIN	G5	SZN	P		
CALIDRIS HIMANTOPUS STILT SANDPIPER	G5	SZN	P		
TRYNGITES SUBRUFICOLLIS BUFF-BREASTED SANDPIPER	G4	SAN	P		
LIMNODROMUS SCOLOPACEUS LONG-BILLED DOWITCHER	G5	SZN	P		
GALLINAGO GALLINAGO COMMON SNIPE	G5	S5B,SZN	MB		
PHALAROPUS TRICOLOR WILSON'S PHALAROPE	G5	S5B,SZN	P		
PHALAROPUS LOBATUS RED-NECKED PHALAROPE	G5	SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
STERCORARIUS PARASITICUS PARASITIC JAEGER	G5	SAN	P		
LARUS PIPIXCAN FRANKLIN'S GULL	G5	S3S4B, SZN	P		
LARUS PHILADELPHIA BONAPARTE'S GULL	G5	SZN	P		
LARUS DELAWARENSIS RING-BILLED GULL	G5	S5B,SZN	P		
LARUS CALIFORNICUS CALIFORNIA GULL	G5	S5B,SZN	P		
LARUS ARGENTATUS HERRING GULL	G5	SAB,SZN	P		
LARUS GLAUCOIDES ICELAND GULL	G5	SAN	P		
STERNA CASPIA CASPIAN TERN	G5	S3B,SZN	P		
STERNA HIRUNDO COMMON TERN	G5	S3B,SZN	P	NLC2	
STERNA FORSTERI FORSTER'S TERN	G5	S3B,SZN	P		
CHLIDONIAS NIGER BLACK TERN	G4	S3B,SZN	P	C2	
COLUMBA LIVIA ROCK DOVE	G5	SE5	U		
COLUMBA FASCIATA BAND-TAILED PIGEON	G5	SAN	P		
ZENAIDA MACROURA MOURNING DOVE	G5	S5B,SZN	MB		
COCCYZUS ERYTHROPTHALMUS BLACK-BILLED CUCKOO	G5	S4B,SZN	P		
OTUS FLAMMEOLUS FLAMMULATED OWL	G4	S1S3B,SZN	P		SENSITIVE
BUBO VIRGINIANUS GREAT HORNED OWL	G5	S5	P		
NYCTEA SCANDIACA SNOWY OWL	G5	SZN	P		
GLAUCIDIUM GNOMA NORTHERN PYGMY-OWL	G5	S4	P		
SPEOTYTO CUNICULARIA BURROWING OWL	G4	S3B,SZN	P		
STRIX VARIA BARRED OWL	G5	S4	P		
STRIX NEBULOSA GREAT GRAY OWL	G5	S3	P		
ASIO OTUS LONG-EARED OWL	G5	S5	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
ASIO FLAMMEUS SHORT-EARED OWL	G5	S4	P		
AEGOLIUS FUNEREUS BOREAL OWL	G5	S3	P		SENSITIVE
AEGOLIUS ACADICUS NORTHERN SAW-WHET OWL	G5	S4	P		
CHORDEILES MINOR COMMON NIGHTHAWK	G5	S5B,SZN	P		
PHALAENOPTILUS NUTTALLII COMMON POORWILL	G5	S4B,SZN	P		
CYPSELOIDES NIGER BLACK SWIFT	G4	S3B,SZN	P		
CHAETURA VAUXI VAUX'S SWIFT	G5	S4B,SZN	P		
AERONAUTES SAXATALIS WHITE-THROATED SWIFT	G5	S5B,SZN	P		
ARCHILOCHUS ALEXANDRI BLACK-CHINNED HUMMINGBIRD	G5	S4B,SZN	P		
STELLULA CALLIOPE CALLIOPE HUMMINGBIRD	G5	S5B,SZN	P		
SELASPHORUS RUFUS RUFOUS HUMMINGBIRD	G5	S5B,SZN	P		
CERYLE ALCYON BELTED KINGFISHER	G5	S5B,SZN	P		
MELANERPES LEWIS LEWIS' WOODPECKER	G4	S4B,SZN	P		
MELANERPES ERYTHROCEPHALUS RED-HEADED WOODPECKER	G5	S5B,SZN	P		
SPHYRAPICUS THYROIDEUS WILLIAMSON'S SAPSUCKER	G5	S4B,SZN	P		
SPHYRAPICUS NUCHALIS RED-NAPED SAPSUCKER	G5	S5B,SZN			
PICOIDES PUBESCENS DOWNY WOODPECKER	G5	S5	P		
PICOIDES VILLOSUS HAIRY WOODPECKER	G5	S5	P		
PICOIDES TRIDACTYLUS THREE-TOED WOODPECKER	G5	S5	P		
PICOIDES ARCTICUS BLACK-BACKED WOODPECKER	G5	S3	P		SENSITIVE
COLAPTES AURATUS NORTHERN FLICKER	G5	S5	P		
DRYOCOPUS PILEATUS PILEATED WOODPECKER	G5	S4	P		
CONTOPUS BOREALIS OLIVE-SIDED FLYCATCHER	G5	S5B,SZN	P		
CONTOPUS SORDIDULUS WESTERN WOOD-PEWEE	G5	S5B,SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
EMPIDONAX TRAILLII WILLOW FLYCATCHER	G5	S5B,SZN	P		
EMPIDONAX MINIMUS LEAST FLYCATCHER	G5	S5B,SZN	P		
EMPIDONAX HAMMONDII HAMMOND'S FLYCATCHER	G5	S4B,SZN	P		
EMPIDONAX OBERHOLSERI DUSKY FLYCATCHER	G5	S5B,SZN	P		
EMPIDONAX OCCIDENTALIS CORDILLERAN FLYCATCHER	G5	S5			
SAYORNIS SAYA SAY'S PHOEBE	G5	S5B,SZN	P		
MYIARCHUS CINERASCENS ASH-THROATED FLYCATCHER	G5	SAN	P		
TYRANNUS VERTICALIS WESTERN KINGBIRD	G5	S5B,SZN	P		
TYRANNUS TYRANNUS EASTERN KINGBIRD	G5	S5B,SZN	P		
EREMOPHILA ALPESTRIS HORNED LARK	G5	S5B,S5N	P		
TACHYCINETA BICOLOR TREE SWALLOW	G5	S5B,SZN	P		
TACHYCINETA THALASSINA VIOLET-GREEN SWALLOW	G5	S5B,SZN	P		
STELGIDOPTERYX SERRIPENNIS NORTHERN ROUGH-WINGED SWALLOW	G5	S5B,SZN	P		
RIPARIA RIPARIA BANK SWALLOW	G5	S5B,SZN	P		
HIRUNDO PYRRHONOTA CLIFF SWALLOW	G5	S5B,SZN	P		
HIRUNDO RUSTICA BARN SWALLOW	G5	S5B,SZN	P		
PERISOREUS CANADENSIS GRAY JAY	G5	S5	P		
CYANOCITTA STELLERI STELLER'S JAY	G5	S5	P		
CYANOCITTA CRISTATA BLUE JAY	G5	SAB,SZN	P		
GYMNORHINUS CYANOCEPHALUS PINYON JAY	G5	S4	P		
NUCIFRAGA COLUMBIANA CLARK'S NUTCRACKER	G5	S5	P		
PICA PICA BLACK-BILLED MAGPIE	G5	S5	U		
CORVUS BRACHYRHYNCHOS AMERICAN CROW	G5	S5B,SZN	U		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
CORVUS CORAX COMMON RAVEN	G5	S5	P		
PARUS ATRICAPILLUS BLACK-CAPPED CHICKADEE	G5	S5	P		
PARUS GAMBELI MOUNTAIN CHICKADEE	G5	S5	P		
PARUS HUDSONICUS BOREAL CHICKADEE	G5	S3S4	P		
PARUS RUFESCENS CHESTNUT-BACKED CHICKADEE	G5	S4	P		
SITTA CANADENSIS RED-BREASTED NUTHATCH	G5	S5	P		
SITTA CAROLINENSIS WHITE-BREASTED NUTHATCH	G5	S4	P		
SITTA PYGMAEA PYGMY NUTHATCH	G5	S4	P		
CERTHIA AMERICANA BROWN CREEPER	G5	S5	P		
SALPINCTES OBSOLETUS ROCK WREN	G5	S5B,SZN	P		
CATHERPES MEXICANUS CANYON WREN	G5	S4	P		
TROGLODYTES AEDON HOUSE WREN	G5	S5B,SZN	P		
TROGLODYTES TROGLODYTES WINTER WREN	G5	S5	P		
CISTOTHORUS PALUSTRIS MARSH WREN	G5	S5B,SZN	P		
CINCLUS MEXICANUS AMERICAN DIPPER	G5	S5	P		
REGULUS SATRAPA GOLDEN-CROWNED KINGLET	G5	S5	P		
REGULUS CALENDULA RUBY-CROWNED KINGLET	G5	S5B,SZN	P		
SIALIA CURRUCOIDES MOUNTAIN BLUEBIRD	G5	S5B,SZN	P		
MYADESTES TOWNSENDI TOWNSEND'S SOLITAIRE	G5	S5	P		
CATHARUS FUSCESCENS VEERY	G5	S5B,SZN	P		
CATHARUS USTULATUS SWAINSON'S THRUSH	G5	S5B,SZN	P		
CATHARUS GUTTATUS HERMIT THRUSH	G5	S5B,SZN	P		
TURDUS MIGRATORIUS AMERICAN ROBIN	G5	S5B,SZN	P		
IXOREUS NAEVIUS VARIED THRUSH	G5	S5B,SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
DUMETELLA CAROLINENSIS GRAY CATBIRD	G5	S5B,SZN	P		
MIMUS POLYGLOTTOS NORTHERN MOCKINGBIRD	G5	SAB,SZN	P		
OREOSCOPTES MONTANUS SAGE THRASHER	G5	S5B,SZN	P		
TOXOSTOMA RUFUM BROWN THRASHER	G5	S5B,SZN	P		
ANTHUS RUBESCENS AMERICAN PIPIT	G5	S5B,SZN	P		
ANTHUS SPRAGUEII SPRAGUE'S PIPIT	G4	S4B,SZN	P		
BOMBYCILLA GARRULUS BOHEMIAN WAXWING	G5	SHB,S5N	P		
BOMBYCILLA CEDRORUM CEDAR WAXWING	G5	S5B,SZN	P		
LANIUS EXCUBITOR NORTHERN SHRIKE	G5	S5N	P		
LANIUS LUDOVICIANUS LOGGERHEAD SHRIKE	G4	S4B,SZN	P	C2	SENSITIVE
STURNUS VULGARIS EUROPEAN STARLING	G5	SE5	U		
VIREO SOLITARIUS SOLITARY VIREO	G5	S5B,SZN	P		
VIREO GILVUS WARBLING VIREO	G5	S5B,SZN	P		
VIREO OLIVACEUS RED-EYED VIREO	G5	S5B,SZN	P		
VERMIVORA PEREGRINA TENNESSEE WARBLER	G5	S3S4B,SZN	P		
VERMIVORA CELATA ORANGE-CROWNED WARBLER	G5	S5B,SZN	P		
VERMIVORA RUFICAPILLA NASHVILLE WARBLER	G5	S5B,SZN	P		
DENDROICA PETECHIA YELLOW WARBLER	G5	S5B,SZN	P		
DENDROICA MAGNOLIA MAGNOLIA WARBLER	G5	SAN	P		
DENDROICA CORONATA YELLOW-RUMPED WARBLER	G5	S5B,SZN	P		
DENDROICA NIGRESCENS BLACK-THROATED GRAY WARBLER	G5	SAN	P		
DENDROICA TOWNSENDI TOWNSEND'S WARBLER	G5	S5B,SZN	P		
DENDROICA STRIATA BLACKPOLL WARBLER	G5	SZN	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
MNIOTILTA VARIA BLACK-AND-WHITE WARBLER	G5	S1S3B,SZN	P		
SETOPHAGA RUTICILLA AMERICAN REDSTART	G5	S5B,SZN	P		
SEIURUS AUROCAPILLUS OVENBIRD	G5	S5B,SZN	P		
SEIURUS NOVEBORACENSIS NORTHERN WATERTHRUSH	G5	S5B,SZN	P		
OPORORNIS TOLMIEI MACGILLIVRAY'S WARBLER	G5	S5B,SZN	P		
GEOTHLYPIS TRICHAS COMMON YELLOWTHROAT	G5	S5B,SZN	P		
WILSONIA PUSILLA WILSON'S WARBLER	G5	S5B,SZN	P		
ICTERIA VIRENS YELLOW-BREASTED CHAT	G5	S5B,SZN	P		
PIRANGA LUDOVICIANA WESTERN TANAGER	G5	S5B,SZN	P		
PHEUCTICUS LUDOVICIANUS ROSE-BREASTED GROSBEAK	G5	SAB,SZN	P		
PHEUCTICUS MELANOCEPHALUS BLACK-HEADED GROSBEAK	G5	S5B,SZN	P		
PASSERINA AMOENA LAZULI BUNTING	G5	S5B,SZN	P		
PASSERINA CYANEA INDIGO BUNTING	G5	S2S4B,SZN	P		
PIPILO CHLORURUS GREEN-TAILED TOWHEE	G5	S4B,SZN	P		
PIPILO ERYTHROPHTHALMUS RUFOUS-SIDED TOWHEE	G5	S5B,SZN	P		
SPIZELLA ARBOREA AMERICAN TREE SPARROW	G5	SZN	P		
SPIZELLA PASSERINA CHIPPING SPARROW	G5	S5B,SZN	P		
SPIZELLA PALLIDA CLAY-COLORED SPARROW	G5	S4B,SZN	P		
SPIZELLA BREWERI BREWER'S SPARROW	G5	S4B,SZN	P		
POOECETES GRAMINEUS VESPER SPARROW	G5	S5B,SZN	P		
CHONDESTES GRAMMACUS LARK SPARROW	G5	S5B,SZN	P		
CALAMOSPIZA MELANOCORYS LARK BUNTING	G5	S5B,SZN	P		
PASSERCULUS SANDWICHENSIS SAVANNAH SPARROW	G5	S5B,SZN	P		
AMMODRAMUS BAIRDII BAIRD'S SPARROW	G3	S3B,SZN	P	C2	

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
AMMODRAMUS SAVANNARUM GRASSHOPPER SPARROW	G4	S4B,SZN	P		
PASSERELLA ILIACA FOX SPARROW	G5	S5B,SZN	P		
MELOSPIZA MELODIA SONG SPARROW	G5	S5B,SZN	P		
MELOSPIZA LINCOLNII LINCOLN'S SPARROW	G5	S5B,SZN	P		
ZONOTRICHIA ALBICOLLIS WHITE-THROATED SPARROW	G5	SZN	P		
ZONOTRICHIA LEUCOPHRYS WHITE-CROWNED SPARROW	G5	S5B,SZN	P		
ZONOTRICHIA QUERULA HARRIS' SPARROW	G5	SZN	P		
JUNCO HYEMALIS DARK-EYED JUNCO	G5	S5B,SZN	P		
CALCARIUS MCCOWNII MCCOWN'S LONGSPUR	G4?	S5B,SZN	P		
CALCARIUS LAPPONICUS LAPLAND LONGSPUR	G5	SZN	P		
CALCARIUS ORNATUS CHESTNUT-COLLARED LONGSPUR	G5	S5B,SZN	P		
PLECTROPHENAX NIVALIS SNOW BUNTING	G5	S5N	P		
DOLICHONYX ORYZIVORUS BOBOLINK	G5	S4B,SZN	P		
AGELAIUS PHOENICEUS RED-WINGED BLACKBIRD	G5	S5B,SZN	U		
STURNELLA NEGLECTA WESTERN MEADOWLARK	G5	S5B,SZN	P		
XANTHOCEPHALUS XANTHOCEPHALUS YELLOW-HEADED BLACKBIRD	G5	S5B,SZN	U		
EUPHAGUS CAROLINUS RUSTY BLACKBIRD	G5	SZN	U		
EUPHAGUS CYANOCEPHALUS BREWER'S BLACKBIRD	G5	S5B,SZN	U		
QUISCALUS QUISCULA COMMON GRACKLE	G5	S5B,SZN	P		
MOLOTHRUS ATER BROWN-HEADED COWBIRD	G5	S5B,SZN	P		
ICTERUS GALBULA NORTHERN ORIOLE	G5	S5B,SZN	P		
LEUCOSTICTE ATRATA BLACK ROSY-FINCH	G4	S3B,S3N	P		
PINICOLA ENUCLEATOR PINE GROSBEAK	G5	S5	P		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
CARPODACUS PURPUREUS PURPLE FINCH	G5	SAN	P		
CARPODACUS CASSINII CASSIN'S FINCH	G5	S5	P		
CARPODACUS MEXICANUS HOUSE FINCH	G5	S5	P		
LOXIA CURVIROSTRA RED CROSSBILL	G5	S5	P		
LOXIA LEUCOPTERA WHITE-WINGED CROSSBILL	G5	S4	P		
CARDUELIS FLAMMEA COMMON REDPOLL	G5	S5N	P		
CARDUELIS HORNEMANNI HOARY REDPOLL	G5?	SZN	P		
CARDUELIS PINUS PINE SISKIN	G5	S5	P		
CARDUELIS TRISTIS AMERICAN GOLDFINCH	G5	S5B,SZN	P		
COCCOTHRAUSTES VESPERTINUS EVENING GROSBEAK	G5	S5	P		
PASSER DOMESTICUS HOUSE SPARROW	G5	SE5	P		
Fish					
COTTUS BAIRDI MOTTLED SCULPIN	G5	S5	NG		
ONCORHYNCHUS NERKA KOKANEE	G5	SE5	GF		
ONCORHYNCHUS CLARKI LEWISI WESTSLOPE CUTTHROAT TROUT	G4T3	S3	GF		SENSITIVE
ONCORHYNCHUS MYKISS RAINBOW TROUT	G5	S5	GF		
PROSOPIUM WILLIAMSONI MOUNTAIN WHITEFISH	G5	S5	GF		
SALMO TRUTTA BROWN TROUT	G5	SE5	GF		
SALVELINUS FONTINALIS BROOK TROUT	G5	SE5	GF		
THYMALLUS ARCTICUS MONTANUS MONTANA ARCTIC GRAYLING	G5T2	S1	GFRH	C1	SENSITIVE
CARASSIUS AURATUS GOLDFISH	G5	SE4	NG		
CYPRINUS CARPIO COMMON CARP	G5	SE5	NG		
GILA ATRARIA UTAH CHUB	G4?	SE4	NG		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
PIMEPHALES PROMELAS FATHEAD MINNOW	G5	S5	NG		
PTYCHOCHEILUS OREGONENSIS NORTHERN SQUAWFISH	G5	S5	NG		
RHINICHTHYS CATARACTAE LONGNOSE DACE	G5	S5	NG		
HYBOPSIS GRACILIS FLATHEAD CHUB	G5	S5	NG		
CATOSTOMUS CATOSTOMUS LONGNOSE SUCKER	G5	S5	NG		
CATOSTOMUS COMMERSONI WHITE SUCKER	G5	S5	NG		
NOTURUS FLAVUS STONECAT	G5	S5	NG		
LOTA LOTA BURBOT	G5	S5	GF		
POMOXIS NIGROMACULATUS BLACK CRAPPIE	G5	SE5	NG		
PERCA FLAVESCENS YELLOW PERCH	G5	SE5	NG		
STIZOSTEDION VITREUM WALLEYE	G5	SE5	GF		
Mammals					
SOREX CINEREUS MASKED SHREW	G5	S5	NG		
SOREX MONTICOLUS DUSKY OR MONTANE SHREW	G5	S5	NG		
MYOTIS LUCIFUGUS LITTLE BROWN MYOTIS	G5	S5	NG		
MYOTIS VOLANS LONG-LEGGED MYOTIS	G5	S4	NG		
EPTESICUS FUSCUS BIG BROWN BAT	G5	S4	NG		
LASIURUS CINEREUS HOARY BAT	G5	S4	NG		
OCHOTONA PRINCEPS AMERICAN PIKA	G5	S5	NG		
SYLVILAGUS NUTTALLII MOUNTAIN COTTONTAIL	G5	S4	NG		
LEPUS AMERICANUS SNOWSHOE HARE	G5	S5	NG		
LEPUS TOWNSENDII WHITE-TAILED JACK RABBIT	G4	S4	NG		
TAMIAS AMOENUS YELLOW-PINE CHIPMUNK	G5	S5	NG		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
TAMIAS RUFICAUDUS RED-TAILED CHIPMUNK	G5	S5	NG		
MARMOTA FLAVIVENTRIS YELLOW-BELLIED MARMOT	G5	S5	NG		
MARMOTA CALIGATA HOARY MARMOT	G5	S4	NG		
SPERMOPHILUS RICHARDSONII RICHARDSON'S GROUND SQUIRREL	G5	S5	NG		
SPERMOPHILUS COLUMBIANUS COLUMBIAN GROUND SQUIRREL	G5	S5	NG		
SPERMOPHILUS TRIDECEMLINEATUS THIRTEEN-LINED GROUND SQUIRREL	G5	S5	NG		
SPERMOPHILUS LATERALIS GOLDEN-MANTLED GROUND SQUIRREL	G5	S5	NG		
CYNOMYS LUDOVICIANUS BLACK-TAILED PRAIRIE DOG	G5	S4	NG		
TAMIASCIURUS HUDSONICUS RED SQUIRREL	G5	S5	NG		
GLAUCOMYS SABRINUS NORTHERN FLYING SQUIRREL	G5	S4	NG		
THOMOMYS TALPOIDES NORTHERN POCKET GOPHER	G5	S5	NG		
CASTOR CANADENSIS AMERICAN BEAVER	G5	S5	FB		
PEROMYSCUS MANICULATUS DEER MOUSE	G5	S5	NG		
ONYCHOMYS LEUCOGASTER NORTHERN GRASSHOPPER MOUSE	G5	S5	NG		
NEOTOMA CINEREA BUSHY-TAILED WOODRAT	G5	S5	NG		
CLETHRIONOMYS GAPPERI SOUTHERN RED-BACKED VOLE	G5	S5	NG		
PHENACOMYS INTERMEDIUS HEATHER VOLE	G5	S4	NG		
MICROTUS PENNSYLVANICUS MEADOW VOLE	G5	S5	NG		
MICROTUS MONTANUS MONTANE VOLE	G5	S5	NG		
MICROTUS LONGICAUDUS LONG-TAILED VOLE	G5	S5	NG		
MICROTUS RICHARDSONI WATER VOLE	G5	S4	NG		
ONDATRA ZIBETHICUS MUSKRAT	G5	S5	FB		
SYNAPTOMYS BOREALIS NORTHERN BOG LEMMING	G5	S2	NG		SENSITIVE
MUS MUSCULUS HOUSE MOUSE	G5	SE5	NG		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
ZAPUS PRINCEPS WESTERN JUMPING MOUSE	G5	S5	NG		
ERETHIZON DORSATUM COMMON PORCUPINE	G5	S5	NG		
CANIS LATRANS COYOTE	G5	S5	U		
CANIS LUPUS GRAY WOLF	G4	S1	E	LELTNL	ENDANGERED
VULPES VULPES RED FOX	G5	S5	NG		
URSUS AMERICANUS BLACK BEAR	G5	S5	GA		
URSUS ARCTOS GRIZZLY OR BROWN BEAR	G4	S3?	GARH	LTLENL	
PROCYON LOTOR COMMON RACCOON	G5	S5	NG		
MARTES AMERICANA AMERICAN MARTEN	G5	S4	FB		
MUSTELA ERMINEA ERMINE	G5	S5	FB		
MUSTELA NIVALIS LEAST WEASEL	G5	S4	U		
MUSTELA FRENATA LONG-TAILED WEASEL	G5	S5	U		
MUSTELA VISON MINK	G5	S5	FB		
GULO GULO WOLVERINE	G4	S3	FBRH	C2NL	SENSITIVE
TAXIDEA TAXUS AMERICAN BADGER	G5	S4	NG		
MEPHITIS MEPHITIS STRIPED SKUNK	G5	S5	U		
LUTRA CANADENSIS NORTHERN RIVER OTTER	G5	S4	FB		
FELIS CONCOLOR MOUNTAIN LION	G4	S4	GA		
FELIS LYNX LYNX	G5	S3	FBRH	C2NL	SENSITIVE
FELIS RUFUS BOBCAT	G5	S5	FB		
ODOCOILEUS HEMIONUS MULE DEER	G5	S5	GA		
ODOCOILEUS VIRGINIANUS WHITE-TAILED DEER	G5	S5	GA		
ALCES ALCES MOOSE	G5	S5	GA		

MONTANA NATURAL HERITAGE PROGRAM
Vertebrate Species Known or Suspected to Occur in Lewis & Clark County

Name Common Name	Global Rank	State Rank	State Status	USF&WS Status	USFS Status
ANTILOCAPRA AMERICANA PRONGHORN	G5	S5	GA		
OREAMNOS AMERICANUS MOUNTAIN GOAT	G5	S5	GA		
OVIS CANADENSIS MOUNTAIN SHEEP	G4	S4	GA		
Reptiles					
CHRYSEMYS PICTA PAINTED TURTLE	G5	S5	NG		
PHRYNOSOMA DOUGLASI SHORT-HORNED LIZARD	G5	S4	NG		
CHARINA BOTTAE RUBBER BOA	G5	S4	NG		
COLUBER CONSTRICTOR RACER	G5	S5	NG		
PITUOPHIS MELANOLEUCUS PINE OR GOPHER SNAKE	G5	S5	NG		
THAMNOPHIS ELEGANS WESTERN TERRESTRIAL GARTER SNAKE	G5	S5	NG		
THAMNOPHIS SIRTALIS COMMON GARTER SNAKE	G5	S5	NG		
CROTALUS VIRIDIS WESTERN RATTLESNAKE	G5	S4	NG		

383 Records listed.

APPENDIX H

APPENDIX H. Economics of Elk Hunting in Hunting Districts Surrounding the Helena Area, Based on 1993 Dollars

ELK											
HD	NUMBER OF HUNTERS	HUNTER DAYS RES	HUNTER DAYS NR	EXPENDITURES RES[1]	EXPENDITURES NR[2]	NET VALUE[3]	HD	NUMBER OF HUNTERS	HUNTER DAYS RES	HUNTER DAYS NR	EXPENDITURES RES	EXPENDITURES NR	NET VALUE
215	2,365	15,243 (16,652)	1,409	816,720	354,828	1,472,203	445	1,523	5,484 (6,225)	741	293,833	186,606	550,352
280	574	2,098 (3,776)	1,678	112,411	422,571	333,836	446	1,708	5,813 (7,289)	1,476	311,461	371,701	644,420
281	2,121	11,148 (12,744)	1,596	597,310	401,921	1,126,697	455	677	2,250 (2,443)	193	120,555	48,603	215,986
282	360	1,687 (1,822)	135	90,389	33,997	161,083	818	1,264	9,733 (10,074)	341	521,494	85,874	890,642
283	2,801	17,955 (18,937)	982	962,029	247,297	1,674,220	835	1,709	9,457 (9,694)	237	506,706	59,684	857,047
285	1,015	6,364 (7,101)	737	340,983	185,599	627,799	839	1,547	8,116 (8,460)	344	434,855	86,629	747,949
291	1,248	6,569 (7,287)	718	351,967	180,814	644,244	843	1,254	7,016 (7,592)	576	375,917	145,054	671,209
292	2,374	14,649 (15,381)	732	784,893	184,340	1,359,834	850	889	5,482 (5,980)	498	293,726	125,411	528,692
293	2,449	12,725 (13,824)	1,099	681,805	276,761	1,222,180	870	604	3,513 (3,683)	170	188,227	42,811	325,614
421	302	1,359 (1,445)	86	72,815	21,657	127,752	880	3,826	23,194 (24,172)	978	1,242,734	246,290	2,137,047
422	703	2,431 (3,497)	1,066	130,253	268,451	309,170	891	875	4,116 (4,806)	690	220,535	173,763	424,898
423	439	1,653 (2,025)	372	88,568	93,681	179,030	892	2,196	11,707 (12,655)	948	627,261	238,735	1,118,829
							TOTALS				$10,167,447 ($14,781,780)	$4,614,333	$18,220,063

[1]Resident expenditures for elk hunting = $53.58/day/person

[2]Non-resident expenditures for elk hunting = $251.83/day/person

[3]Net value of a day of elk hunting = $88.41

APPENDIX I

INTEROFFICE MEMORANDUM

To: Governor Marc Racicot

From: Cork Mortensen, Livestock
Pat Graham, ~~DFWP~~

Date: September 14, 1994

Re: Elk Valley TB Testing

With the completion of field operations for the first phase of the Elk Valley TB testing program, we have compiled information in response to your request of August 26. Before addressing each of your questions, both agencies would like to acknowledge the tremendous cooperation and positive attitude of all the agencies and staff involved in this sampling effort. Thanks to the assistance of APHIS, ADC, USDA, Department of Livestock and Department of Fish, Wildlife and Parks this program was planned and executed with the highest level of professionalism, organization and efficiency. It is gratifying to see such enthusiastic cooperation when working under difficult conditions.

1. What was the total cost to each department to conduct the wildlife harvest?

   The total cost of this phase of the operation, including planning and preparation, was $58,284.

   FWP = $24,051
   DoL = $20,410
   USDA = $12,952
   ADC = $ 871

2. What department funding sources serve to pay these costs?

   DoL expenses were paid out of the animal health budget. FWP costs were primarily paid out of the department's license account.

3. How many animals were actually harvested? What species were taken? Did you encounter any surprises or difficulties during the harvest?

The total number of animals killed included:

116 adult Deer
15 fawn Deer
17 coyote
3 porcupine
1 elk
1 antelope
1 rabbit

There were no major surprises during the surveillance effort. The success for harvesting deer was better than expected. We did not locate any ground squirrel activity or badger activity, though we expected to find some. The landowners indicate they have few of these ground dwelling rodents, and that is good.

There was no gross evidence of TB in the tissues examined. Several animals had other lesions probably not related to TB. The histopathology is underway at NVSL in Ames, Iowa. One coyote had lesions weakly suggestive of a disease that could be TB but it will be necessary to complete the histopath and bacteriology to confirm this. Histopathology is expected to be completed by the middle of September and cultures should be available by early November. Cultures are now underway at NVSL.

Two of the Rag Horn shooter bulls killed by Mike Miller on the Elk Valley game farm during the surveillance effort were identified with suspicious lesions. Early reports indicate that these animals did not have TB.

4. Based upon your experience with the Elk Valley elk farm situation, do you suggest any rule or statute changes in game farm management, disease control or other issues?

In 1993 the legislature revised the laws relating to game farm management in Montana. Joint rule-making with FWP and DoL occurred in 1992 and resulted in comprehensive regulations. A Game Farm Desk Reference was prepared and distributed this past July to explain the program to anyone interested in game farming rules and regulations. In addition, FWP and DoL initiated meetings in July to consider additional changes to the rules to enhance management effectiveness. Discussions have focused on disease testing requirements, surveillance, animal identification, record keeping, handling and quarantine facilities, fencing requirements, and DNA and genetic testing/identification. A draft of rule revisions is expected to be available for discussion later this fall, hopefully in October. It is expected that these revisions will address many of the concerns that have arisen as a result of the Elk Valley situation.

Elk Valley has pointed out some important issues. Game farms that encompass large expanses of property present special

challenges to owners and regulators. It is nearly impossible to verify actual numbers of game farm animals at any given time, and it is difficult to round up animals for marking and disease testing. FWP waived the marking requirements for the Bighorn (now Sunlight) Game Farm in acknowledgement of this problem. Now that the problem of animal disease is a bigger factor, it is important to be able to collect and present animals for testing on a regular basis. This has been difficult at Elk Valley and impossible at Sunlight.

Another problem inherent in large game farms is the difficulty of inspecting and monitoring the extensive fences. Natural factors such as fallen trees and gully washouts are a threat to the integrity of the fences. Badgers, coyotes and foxes are capable of digging under the fences, and some animals (including deer) are capable of climbing or jumping the fences. The more miles of fencing, the greater the threat from animal egress and ingress and from nose-to-nose contact with free ranging wildlife.

Game farming operations that can be readily monitored and maintained, and that incorporate adequate handling and holding facilities capable of isolating the game farm animals from wildlife and livestock present a far preferable situation from both management and disease control perspectives. Also needed is greater manpower and money to conduct appropriate facilities inspections and better disease surveillance inside the facilities.

There is also a lack of incentive for game farmers to expeditiously clean up potentially infected animals. In many ways they can continue to do business even while under quarantine, so long as they do not move live animals off their facility. If they have velveting operations or shooter bulls, the effect of a quarantine may not necessarily interfere with their operation. DoL's power to impose an effective quarantine through isolation or require immediate depopulation needs to be strengthened.

5. Are you satisfied the elk on the Elk Valley Game Farm no longer pose a disease threat to wildlife?

The Elk Valley Game Farm continues to pose a threat to wildlife in the surrounding area and to deer on the Sunlight Game Farm. Reducing wildlife populations in the area has reduced the risk to some extent but the implementation of additional control measures, as planned, is necessary to further reduce the potential risk of disease transmission until the elk at Elk Valley are no longer a reservoir for TB. Plans include harvesting any wild elk observed in the area and several kill permits have been issued to area landowners for this purpose. Some aerial surveillance is also anticipated. With the start of hunting season, hunters will be asked to provide harvested animal heads for testing. FWP wardens will

be busy during hunting season but are aware of the importance of surveillance in the Elk Valley area. It may be impossible to ensure that all wild elk in the vicinity of Elk Valley are harvested.

All Elk Valley female elk have been TB tested and shooter bulls are being harvested at a rate of approximately two per week. Twelve shooter bulls tested in August were negative for TB. The remaining shooter bulls have not yet been tested and will only be tested after they are shot. DoL has an agreement with Elk Valley to depopulate shooter bulls by the beginning of December. The Montana Game Breeders Association has offered to provide replacement animals to Elk Valley in the spring or early summer, at the discretion of DoL, if Elk Valley depopulates all animals by December 8, 1994. A tentative agreement for depopulation is attached.

With the implementation of efforts to harvest wild elk outside the Elk Valley fences and eventually depopulate the Elk Valley game farm animals, the risk to wildlife should be limited to the short term. Capturing, testing and holding the entire herd in isolation in a double fenced holding facility would have been preferable but would have required extensive construction on site. Hopefully, depopulation of the entire herd by December will prove to be an acceptable alternative.

6. What specific steps are your two departments undertaking to assure we do not have repeat instances of the Elk Valley occurrence?

DoL and FWP are working together to further revise game farm rules for better management of game farms. Improved record keeping and accounting for game farms, better communication between agencies, and a stronger enforcement program are anticipated. FWP will require compliance with game farm rules, particularly fencing and record keeping requirements. Disease risk will be considered in licensing requirements for new game farms. DoL expects all game farms to comply with holding and handling facilities requirements, including quarantine/isolation facilities. In addition to follow-up research and surveillance at Elk Valley, FWP will attempt wildlife surveillance efforts near Phillipsburg and Corwin Springs where TB has been identified in game farms in the past. Resources are a limiting factor. DoL and FWP will be reviewing game farm records to ensure adequate disease monitoring at all game farms. Rule revisions are expected to incorporate annual testing for diseases such as TB and brucellosis.

The difficulty of capturing and testing animals in large game farms needs to be addressed. The authority to depopulate and indemnify a herd when necessary will probably require legislation.

Law Offices

MOULTON, BELLINGHAM, LONGO & MATHER, P.C.

SUITE 1900, SHERATON PLAZA
27 NORTH 27TH STREET
P. O. BOX 2559
BILLINGS, MONTANA 59103-2559
TELEPHONE (406) 248-7731
TELECOPIER (406) 248-7889

FREDRIC D. MOULTON [1912-1989]
WM. H. BELLINGHAM
WARD SWANSER
BRENT R. CROMLEY
GERALD B. MURPHY
RANDY H. BELLINGHAM
ROBERT H. PRIGGE
SIDNEY R. THOMAS
K. KENT KOOLEN
GREGORY G. MURPHY
W. A. FORSYTHE
DOUG JAMES

BRAD H. ANDERSON
THOMAS E. SMITH
JOHN T. JONES
T. THOMAS SINGER
RAMONA HEUPEL STEVENS
MARTHA SHEEHY
HARLAN B. KROGH
DUNCAN A. PEETE

BERNARD E. LONGO

September

12304, 001

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 4

To Les Graham	From Ward Swanser
Co.	Co.
Dept.	Phone # 248-7731
Fax # 1-284-3131	Fax #

Mr. Mike Miller, Manager
Elk Valley Game Ranch
P. O. Box 352
Hardin, MT 59034

Re: Agreement between Elk Valley and Montana Game Breeders Association re Depopulation of Elk Herd

Dear Mike:

Enclosed is a proposed Memorandum of Understanding. Please review that with Greg Stires. If it meets with his approval, have him sign it and return it to me.

Sincerely,

Ward Swanser

WS:sfm

MEMORANDUM OF UNDERSTANDING

This memorandum is entered into between Elk Valley Game Ranch (hereafter "Elk Valley") and the Montana Game Breeders Association (hereafter "MGBA") to memorialize their undertanding concerning the depopulation of the Elk Valley game farm animals.

WHEREAS, Elk Valley operates a game farm in Big Horn County, Montana, and;

WHEREAS, the Department of Livestock, through its State Veterinarian, determined that the game farm animals have Mycobacterium bovis tuberculosis (TB) and has quarantined the Elk Valley herd and has set up a mandatory protocol for the herd that involves periodic testing of the animals by Single Cervical Testing (SCT) until the herd is determined to be free from TB, and;

WHEREAS, the testing protocol may extend over several years; and

WHEREAS, instead of subjecting its herd to a long, drawn out testing procedure, Elk Valley may be willing to depopulate their entire herd if it could receive some assistance or support from the industry; and

WHEREAS, there does not exist any viable indemnity program to compensate Elk Valley for the loss of its animals if it depopulates its herd; and

WHEREAS, MGBA, after consulting with its directors, the representatives from Elk Valley, and the State Veterinarian acting by and behalf of the Department of Livestock, believes it is important that the industry and the State Veterinarian be able to control the TB problem which exists at the Elk Valley facility by depopulating the Elk Valley herd NOW.

In order to assist in the depopulation, MGBA has agreed to solicit support from its members to obtain some replacement cows or heifers to offer Elk Valley as an incentive to depopulate its entire herd by December 8, 1994.

NOW, THEREFORE, IT IS HEREBY AGREED by and between Elk Valley and MGBA as follows:

1. That Elk Valley will take all steps necessary to dispose of its live animals for meat or through hunts before December 1, 1994.

2. That if any animals remain that are not disposed of by hunts or sale of meat by December 1, 1994, Elk Valley will depopulate those remaining animals within a seven day period, and if Elk Valley needs assistance in order to accomplish the depopulation of the entire remaining herd, it will notify the State Veterinarian and the MGBA to ask for assistance in accomplishing the total depopulation of its herd by no later than December 8, 1994.

3. That the MGBA, by and through its Directors, is committed to using their best efforts to obtain thirty cow elk to give to Elk Valley in consideration of it agreeing to the

immediate depopulation of its herd, and in order to assist in reestablishing its herd, based upon initial inquiries it is believed that MGBA will be able to obtain the thirty head, but no guarantees can be made.

4. The replacement elk that will be obtained by MGBA will be secured by obtaining commitments from its existing members to donate animals to Elk Valley in accordance with the copy of the commitment attached.

5. MGBA members who agree to contribute a replacement cow or several replacement cows, will sign an agreement agreeing to contribute their animals to Elk Valley as soon as they receive assurance from the State Veterinarian that Elk Valley can take the animals onto its property.

6. The costs of testing the animals for shipment will be at the expense of the individual contributing the animals. However, the cost of transporting the animals to Elk Valley shall be the responsibility of Elk Valley.

7. That upon signing of this agreement by Elk Valley and the President of MGBA, this agreement shall be made public to the Montana Department of Livestock, the State Veterinarian, and to the members of MGBA to show how the industry, Elk Valley, the Department of Livestock and the State Veterinarian have worked together to arrive at a mutually agreeable method for depopulating the Elk Valley herd.

Dated this _____ day of September, 1994.

ELK VALLEY GAME RANCH

By _____
Greg Stires, Owner

MONTANA GAME BREEDERS ASSOCIATION

By _____
Bob Spoklie, President

TO: MGBA and to Elk Valley Game Farm

This is to confirm that I own the following female elk and have agreed to enter into the program supported by the MGBA to provide replacement animals to Elk Valley Game Ranch in consideration of Elk Valley Game Ranch agreeing to depopulate their entire herd by December 8, 1994.

Animal Owned	Identification	Age
_____	_____	_____

By signing this document, I agree to give the above-described animals to Elk Valley Game Ranch for delivery to them when their property is decontaminated from TB and has the approval of the State Veterinarian to restock the ranch.

I will make the animal available for transportation to Elk Valley as follows: (please check one)

____ Upon 30 days notice.

____ Upon a time mutually agreed upon between Elk Valley and myself.

____ When I work elk in the winter--will call Elk Valley to come and pick up.

____ Other _____

_____ _____

All costs of testing to be borne by MGBA member and all costs to transport animals to be borne by Elk Valley.

Signature: _____

Printed name: _____

Address: _____

_____

APPENDIX J

State Historic Preservation Office
Montana Historical Society
1410 8th Avenue • PO Box 201202 • Helena, MT 59620-1202 • (406) 444-7715

September 6, 1994

RECEIVED
SEP 07 1994
FIELD SERVICES

Michael Korn
MDFW&P
1420 East 6th Ave.
Helena, MT 59620

RE: Guthrie Game Farm Application; File Search T13N/R03W, LC Co.

Dear Michael:

We have run two file system searches (CRIS and CRABS) for the above referenced proposed project, as per your request of 9-2-94. Neither data base contained information relevant to Sections 16 and 21 of T13N/R03W, although 11 recorded sites were located within this Township. The lack of known sites in the two Sections of concern may be a result of the lack of previous survey, rather than a lack of sites. We have no record of prior survey.

We note that the fence plans call for some ground disturbance, and that the impoundment of animals in general has the potential for some surface disruption. Additionally, we have no information regarding ancillary activities such as storage facilities, road improvements, or current surface conditions or use; therefore, at this time, we believe a surface inventory may be warranted.

Thank you for consulting with us.

Sincerely,

Stan

Stan Wilmoth,Ph.D.
Archaeologist

File: MDFW&P/1994

APPENDIX K

NOTICE OF PUBLIC MEETING

A public scoping meeting will be held on Thursday, September 15, 1994, in the Commission Room of the Montana Department of Fish, Wildlife and Parks, 1420 East 6th Ave., Helena, Montana, at 7:00 p.m. The purpose of this meeting is to inform the public of a proposal to license a game farm on Beartooth Mountain, (also known as Sleeping Giant Mountain), in the Southwest 1/4 of Section 16 and in Section 21, Range 3 West, Township 13 North, Lewis and Clark County, Montana. The game farm application proposes to raise elk, mule and white-tailed deer. The applicant also proposes to engage in a velveting operation and a shooting preserve at the facility. The meeting will inform the public of the pending decision and invite participation in the identification of issues that should be considered in making that decision. This meeting is a component of the game farm licensing process and is held in partial compliance with the Montana Environmental Policy Act. For further information, or special accommodations for persons with disabilities, contact the Helena Resource Area office of the Montana Department of Fish, Wildlife and Parks at 444-4720.

Written comments will be accepted up until 5:00 p.m., September 16, 1994. Those wishing to submit comments should do so by mailing them to the Helena Resource Area, Montana Department of Fish, Wildlife and Parks, 1420 East 6th Ave., P.O. Box 200701, Helena, MT 59620-0701.

Montana Department of
Fish, Wildlife & Parks

SLEEPING GIANT ELK RANCH SCOPING MEETING
SEPTEMBER 15, 1994

	NAME	ADDRESS
1.	JERRY L. EWING	P.O. BOX 916 E. Helena, MT 59635
2.	JERRY HUTCH	P.O. Box 5478 HELENA MT 59604
3.	Nac Rosetta	1100 Missoula Helena, MT - 59601
4.	John F Bauer	Box 167 Wolf Creek, MT 59648
5.	Wes Sylvia	1230 Poplar HLNA MT 59601
6.	Jay R. Simmons	1122 poplar Hele MT 5960
7.	Lewis Morris	1814 wilder Helena
8.	Marlene McHugh	Box 1723 Helena
9.	MIKE GRIFFITH	5995 YORK RD "
10.	Jim Guest	USFS 2880 Skyway - Helena
11.	SANDRA SPEEDLOW	1919 GRIZZLY CURCH HELENA
12.	Alice Hinshaw	1604 Common St, 1131 Helena
13.	Palmer Hoovestol	605 Lincoln Rd East Helena
14.	Jack Veich	1548 Concord Rd. Helena
15.	Mike Wilson	HELENA NATIONAL FOREST 2330 SKYWAY DR HELEN
16.	Vicki Sipe	7289 Cooper Ct Helena
17.	Mike Mahoney	452 No Hoback #2 Helena, MT. 59601
18.	Maurice DeRita	RR 1 Box 10 Canyon Creek MT 59633
19.	Roberts Wiss	" " " "
20.	Bill Cumberland	" "
21.	Dennis Iverson	"
22.	Cathy Campbell	RR 3, Box 117 Helena 59601
23.	Pat Rice	515 York Rd Helena 59601
24.	CEDRON JONES	940 WILDER HELENA 59601
25.	Denise Ingram	1110 8th Ave. Helena 59601

SLEEPING GIANT ELK RANCH SCOPING MEETING
SEPTEMBER 15, 1994

	NAME	ADDRESS
1.	Stan Frasier	PO Box 5941 Helena 59604
2.	Bob Sparks	Box 131 Ayrshire, Mont.
3.	Dave Mogel	780 Lacasse Dr. Helena, MT
4.	Gary Ingaman	1110 8th Avenue Helena 59601
5.	Bob Sivertsen	Gates of the Mountains Helena
6.	Mike Wishard	1204 Sorenson Rd Helena 59601
7.	Doug Kowalski	1970 Colorado Gulch Helena 59601
8.	DAVID SCHNEIDER	2520 STUART HELENA 59601
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Maureen DeVries

ADDRESS: Rt 1 Box 10

Conrad, mt. 59425

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Concern that Montana Continue to be Beef T.B. free - We had an experience a year ago with the Cattle being exposed to T B Elk on a game farm. 8 ft fence does not work.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Doug Powell

ADDRESS: 1970 Colonial Circle
Helena MT.

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Proposed Area is located to access to native wildlife populations. An EIS is in order. Complete disease tests should be completed on any (Imported Wildlife.) (Especially from Georgia. Historical Worm tests.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Mike Vashro

ADDRESS: 1204 Sorenson Rd Helena, MT 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

How could Bald Eagles be effected by TB (Bovine) if it showed up on a game farm.

How could Bovine TB effect Humans and is it considered a health risk.

How could Bovine TB effect other wildlife species such as ~~O~~ Bighorn sheep, Rocky Mountain Goats, & antelope.

All the elk that are being transported from Georgia ~~[redacted]~~ insured that they are 100% disease free.

I want an EIS

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Noel Rosetta

ADDRESS: 1100 Missoula, Helena Mt. 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Most of issues have probably been ~~discussed~~ expressed. ~~I believe~~ However some should be emphasized. I am personally opposed to game farms as an (introduced into wildlife habitats), a serious potential for spreading disease, genetic concerns, generally the threat to sportshunting, the basis of ~~a sport~~ an (assumed) fertility cult - hardly justifiable. Please keep me posted as ~~these~~ this issue.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: John F. Baucus

ADDRESS: Box 167

Wolf Creek MT 59648

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

The issues that concern me most as a close landowner have been identified as disease - cost of enforcement - escape - and hybridization. As a landowner disease is the most important consideration. As I run sheep & cattle downstream and in close proximity to the proposed area I am very concerned that enclosed animals do not carry disease and that they cannot escape. As an aside issue for us as a landowner the access road to the proposed location runs through 2 miles of our property. I am concerned about the increased traffic which usually results in increased off road travel and increases in garbage, weed transfer, etc. I hope that all the above issues are seriously considered before issuing a license

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Catherine S. Campbell

ADDRESS: Hilger Hereford Ranch - (near Gates of MTns)
RR 3, Box 117, Helena, MT 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Under human and community impacts -

Gates of Mountains boat tours are educational. How will possible effects of game farm (disease, disruption of migration patterns, etc.) affect the Tourism through the Gates, and the educational ~~function~~ and environmental awareness function of the boat tours,

The listed issues look good, but they not only need to be examined, they need to be examined thoroughly and well. For instance, re: hybridization, will the elk all be tested to make sure they don't have any red deer genes?

I'm very concerned about contamination of Beartooth Creek and contamination of wildlife + livestock through the fence.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Dick Baumberger

ADDRESS: 5495 N. Mont. Ave. #1
Helena, MT 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

I do not believe in commercializing wild game animals. I think this could be the onset of an ill-conceived practice on a massive scale. If this party chooses to pursue this endeavor let him do so in Florida not Montana. If it wasn't for money there would be no need for game farms. There are plenty of elk and deer in the wild.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Debra Worrell

ADDRESS: 780 Paul Ln.
Plantersville, MS.

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

I am definitely for the game farmers. It is a very good industry for the State and I think that there is way too much propaganda going to the newspapers in our State. The game farms that I have seen are clean and the animals are very well taken care of. As far as disease goes, I see them trying and accomplishing keeping their animals tested and keeping them disease free. They have been cooperating with testing and have been given no credit. I'm sure all animals are prone to some disease once in awhile but we don't destroy them all because one becomes sick. Every farmer is responsible to care for problems.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Greg Symiess

ADDRESS: 5228 Castles Rd

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Perimeter Fence should be ~~8~~ two 8' seperated 4' so the elk cannot have physical contact with wild elk.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: CEDRON JONES 940 WILDER HELENA

ADDRESS: For LAST CHANCE AUDUBON SOCIETY

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

(1) fence integrity — need min. 8' high, & Two fences — To prevent nose-to-nose contact w/ wild animals & To prevent mixing.

(2) water quality (esp. re: disease transmission) of Beartooth Creek — which seems to be within the fenced area.

(3) concern for protecting genetics of wild elk & deer population

(4) access to the Sleeping Giant road area (That spring feed gave us Dia subsequent animals) would be closed, especially if it proves a breeding ground for.

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Michael S. Koich

ADDRESS: 1578 Canyon Rd.
Helena MT 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Deny The License
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "
" " "

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Stan Frasier

ADDRESS: PO Box 5841
Helena MT 59604

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

cost to sportsmen or public if extensive mitigation is nessecary? i.E. the Hardian TB out break

will game farm be required to pay full cost licensing and inspection?

This should require an E.I.S.!

(Use back side if additional space is needed)

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Sandra Spendlove

ADDRESS: 1919 Grizzly Gulch
Helena, Mt 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Is there a contigency plan in place if TB is spread to wildlife? Who will pay?

What diseases are prevalent on game farms in the last? What about meningeal worm, tissue worm, or malignant catarrhal fever? Why would we let them import these animals to MT.

What is his record in regards to his game farm in Georgia. Any violations?

What safeguards are there against laundering animals?

(over)

(Use back side if additional space is needed)

please address the human health hazards of TB, Recent statements by Sirahy contridict a number of experts. Please clarify.

Considering ramifications of this game farm, an EIS should be required. There has been limited time for public input.

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Bob Spokes

ADDRESS: Antelope, Mont

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

I think you should let the man do as he wishes with his land. It is a very good industry and should be encouraged.

(Use back side if additional space is needed)

Phone Comment

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: George Holton

ADDRESS: 1219 11th Ave
Helena 59601

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

Concerns to address:
- Genetic contamination
- Transmission of Disease & parasites (CWD)
- Will there be an impact on Bald Eagles that utilize the area?

(Use back side if additional space is needed)

Visit 9/15 d.m.

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: MRS. Viola Nelson (Carrie-Hilger Ranch)

ADDRESS: PO Box 632
Helena 59624

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

- Own senior water rights on Beartooth Ck
- Concerned about disease transmiss. to cattle + people via Beartooth Ck running thru Game Farm
- Especially concerned w/ TB

(Use back side if additional space is needed)

Having read the Sleeping Giant game farm proposal article by Mark Downey on Wednesday Sept. 7 is indeed controversial at the least.

After having to move cattle to different pasture in south central Montana last summer we had the misfortune of having a game farm next to the cattle. The game farm had some elk that tested positive for Tuberculosis (TB). With Montana being TB free this poses a serious threat to the livestock (domestic and wild) industry of the State. The elk were surrounded by an 8 foot fence but were able to escape during the rut to challenge wild elk with cattle mixed in with them.

Once the TB was detected several hundred cattle had to be tested for the disease by the state and local veterinarians and technicians. Our cattle were confined for over 3 months until they were cleared. Forcing us to miss out on good market prices for once as we were unable to sell any cattle until they were cleared. So the idea that cattle contaminating the elk as the article stated is laughable considering what we went through.

Some questions that do need to be addressed are:

1. Which agency will take the responsibility for the inspection of the game farms? Fish, Wildlife and Parks as the elk fall in their domain or the State Livestock Inspectors since the elk will be used as livestock?

2. Will the elk be tested as cattle have to be tested before they can be transported into or across our state to ensure that Montana remains TB free?

3. If allowed to operate the game farm and our experience with elk being able to escape an 8 foot fence wouldn't different rules for their enclosure be appropriate?

4. Cutting off the antlers while they are still in the velvet for sale is nauseating to those of us who raise livestock. To willingly make the animals suffer and get possible infections for profit is appalling. Also there is a world conference going on now to reduce the worlds population so why promote promiscuity?

5. No convicted felon can operate a game farm in the State according to the law, but hearing officer Dennis Moreen saw the good samaritan in Guthrie. Someone willing to plead guilty to a felony conviction for an employee who was embezzling funds? No innocent person in their right mind would do such a thing so is it possible a deal was struck in Guthrie's favor? Does the law state if you did it for the company and not yourself then it is O.K. to run a game farm?

Robert Maureen DeVries
Rt 1 Box 10
Conrad, Mt. 59425

RECEIVED
SEP 2[illegible] 1994
FIELD SERVICES

RECEIVED
SEP 20 1994
LEGAL UNIT
FISH WILDLIFE & PARKS

September 19, 1994

Department of Fish, Wildlife
& Parks
ATTN: Robert N. Lane
1420 E. Sixth Avenue
Helena MT 59620

Re: Gue Guthrie Game Farm Application

Dear Mr. Lane:

I would like to voice my opposition to the granting of the application of Mr. Guthrie for Game Farm in Montana. I believe that the risk of genetic pollution and also disease pollution from game farms in general is one that we should not have to undertake. It seems without question that the game farm animals will escape and I do not think it is wise gamble on these potential hazards. Thank you for your attention and consideration.

Very truly yours,

GNMc:tss By George N. McCabe

3234 - 7th Ave So.
Great Falls, Mt. 59405

15 Sept 94

To Whom it may concern:

In reference to the public meeting being held concerning the proposal to open a game farm in the Beartooth Mountains - I am steadfastly opposed to the proposal.

The threat these game farms present to the native wildlife populations of Montana is unacceptable. I believe Wyoming has taken the proper action in completely banning these operations. The risk of genetic pollution to the wild free-ranging elk populations and also of tuberculosis to elk and deer is too great. Both of these problems have manifested themselves around game farms already in operation in Montana.

Until the Dept. of Fish wildlife & Parks comes up with a long term solution to the "game farm" problem, which I believe should be the outright banning of these operations, I think it would be <u>very</u> unwise to allow the start up of another one.

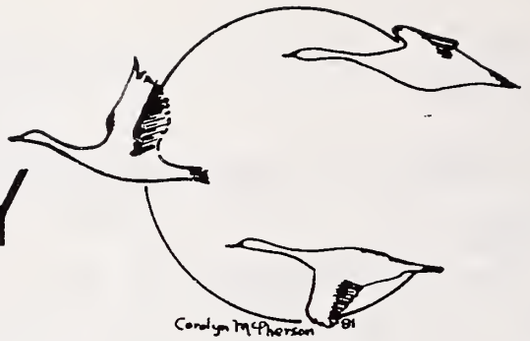
Sincerely

Brian K Nicholson
587 Armington Rd
Belt, MT 59412

377-4146

RECEIVED
SEP 21 1994
FISH, WILDLIFE & PARKS
REGION 8

Upper Missouri Breaks
AUDUBON SOCIETY
P.O. Box 2362, Great Falls, Montana, 59403



September 15, 1994

Helena Resource Center
Dept. of Fish, Wildlife
& Parks
1428 - 6th Avenue
Helena, MT 59620-0701

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

Gentlemen:

Our Audubon Chapter has discussed the game farm proposal in the Sleeping Giant area. During that discussion, no one voiced any support for such a proposal. Instead, the comments, in the strongest terms I have heard on any issue our Chapter has discussed, voiced opposition to this proposal.

Although a number of different concerns were voiced, I will comment on just a few. First, many members of the Chapter are sports persons and they feel that the shooting game preserve proposal could result in even more anti-hunting rhetoric than presently exists. Most Montanan's do not believe that this sort of activity is "hunting".

Second, as recent news articles indicate, it is impossible to make sure that the game farms comply with all state laws and regulations. Due to the location of the game farms and the limited staff in your department, there is no way to guarantee that any new game farms will remain in compliance with Montana law.

Last, all of us respect the rights of private land owners. Most of us are private land owners. However, when the activities of a private land owner directly affect the activities of the rest of us and the public in general, those activities must be curtailed. The possibility, and indeed the probability, of the spread of disease and genetic contamination from these game farms it too great. It is certainly not worth the risk.

I would ask that you take our concerns into consideration in dealing with the Sleeping Giant area game farm proposal. I thank you in advance for your consideration.

Sincerely yours,

Howard F. Strause

HFS/jan

Hope B. Stevens
Conservation Planning
406-442-9424

ALL U.S. MAIL:
P.O. Box 5027, Helena Montana 59604
UPS/FED X ONLY:
855 Marysville Road, Helena, Montana 59601

Department of
Fish, Wildlife and Parks

September
15-1994

Dear Gayle

I'm writing to you, because, at least we've come to know each other over the Phone and perhaps you wouldn't mind passing these Comments on to the Director at Fish Wild life and Parks.

Bob and I have always felt that Game Farms are TOTALLY "unsporting"! - the idea of making money out of shooting CAPTIVE Wild life including Elk and deer for their antlers for the Killing Asian APHRodiniac MARKET is disgusting.

As LAND OWNERS whose plan it is to Protect Wildlife on our 1500 Acre FARM, we are VERY MUCH CONCERNED About the STRONG possibility of these CAPTIVE ELK, Mule and White TAIL Deer carrying diseases they could TRANSMIT to Wild Game and FOR THAT MATTER to CATTLE on RANCHES AND Farms in the area

3. Who will be responsible for returning any of these unfortunate Creatures, Should they escape From the Game Farm and While Free they could mix with Wild Deer and Elk and cause Genetic problems as well as spread disease. —

4. Wherever these "Canned Hunts" take place there could very well be danger for anyone in the vicinity from stray bullets!

Finally —
Just in the past Few Weeks There has been a case of poaching Near by our Farm! — shooting Elk for their antlers to send to the Asian Market for Aphrodisiacs. — If this Game Farm gets a Permit, This could encourage more of this poaching for Profit! —

It looks to us as if Not only will this be a problem where Wildlife and livestock are Concerned, but Could open a Pandora's box of all Sorts of other Troubles for Fish, Wildlife and People Do come up to the Farm some time soon and I will tell you more about our Ponds & Wetlands protect! Best Wishes - Hope Sierens

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

09-14-94

TO WHOM IT MAY CONCERN,

ANOTHER PROPOSED GAME FARM,COME ON LETS GET TOUGH HERE.I KNOW THAT WE AS MONTANANS ARE GOING TO HAVE A DIFFICULT TIME STOPPING THE MANY ENTREPRENEURS THAT ARE COMING INTO OUR STATE AND LOOKING TO MAKE A QUICK DOLLAR,BUT THE MFWP DEPARTMENT HAS TO PUT THE BINDERS ON THE GAME FARM BUSINESS.THEY MAY WORK IN TEXAS,WHERE THE MAJOR BIG GAME ANIMAL IS THE WHITETAIL DEER.HERE IN MONTANA AND SPECIFICALLY THE AREA THE APPLICANT IS TRYING TO GET LICENSED FOR HAS A WIDE DIVERSITY OF GAME ALL OF WHICH COULD AND IN MY OPINION WOULD BE ADVERSELY AFFECTED BY THE GAME FARM.THE SECOND PROPOSAL WHICH WOULD ESTABLISH A SHOOTING FARM GOES AGAINST WHAT I BELIEVE MONTANA IS TRYING TO KEEP ALIVE AND THAT IS OUR RIGHT TO HUNT IN AN OPEN AND FREE ENVIRONMENT.HOW MUCH MONEY DOES THE STATE THINK THAT THIS WOULD TAKE OUT OF THE STATE COFFERS.I AM NOT JUST TALKING ABOUT THE LICENSE FEES BUT MORE SPECIFICALLY THE LOSS OF REVENUE TO AN ALREADY ECONOMICALLY DEPRESSED GROUP; "GUIDES".HOW MUCH ADVERSE PUBLICITY WILL WE GET FROM THE GROWING NUMBERS OF PEOPLE THAT ARE TRYING TO ABOLISH OUR RIGHT TO HUNT? HOW MUCH PUBLICITY WILL WE RECEIVE WHEN WE DISCOVER THAT OUR WILD POPULATION OF ANIMALS BECOMES INFECTED WITH TB? DO WE BELIEVE FOR ONE MINUTE THAT THE APPLICANTS ARE SCRUPULOUS AND WILL NEVER LOWER THEMSELVES TO TRAPPING WILD ELK OR DEER OR SHEEP FOR THEIR "FARM".THE GAME FARM OWNERS THAT ARE IN OPERATION NOW HAVE NOT SHOWN THEMSELVES TO BE A CREDIBLE GROUP OF PEOPLE. WE NEED TO STOP THE GROWING NUMBERS OF PEOPLE THAT THINK THAT THEY CAN COME TO MONTANA AND LIVE THE GOOD LIFE AT THE

EXPENSE OF THE PEOPLE THAT HAVE LIVED HERE FOR YEARS OR IN SOME CASES GENERATIONS.LETS GET RID OF THESE UNSCRUPULOUS INDIVIDUALS AND CORPORATIONS THAT ARE INFESTING THIS STATE.LETS MAKE OUR FIRST PRIURITY STOPPING NEW GAME FARMS AND GETTING RID OF THE ONES WE HAVE RIGHT NOW.WE DON'T NEED THEM,AND MOST OF US DON'T WANT THEM IN THE STATE IN THE FIRST PLACE.I WOULD LIKE THIS APPLICANTS REQUEST TO BE DENIED AND ANY FUTURE APPLICANTS TO BE DENIED.THE WAY THE TERM SHOOTING FARM IS USED MAKES ME BELIEVE THAT IF THIS APPLICATION IS APPROVED WE WILL SEE THE "RICH AND FAMOUS" COMING TO MONTANA AND SHOOTING TROPHY ANIMALS THAT ONLY LIVE TO SATISFY THE THIRST OF THE "TROPHY" HUNTER,PEOPLE WHO HUNT NOT FOR THE SHEER ENJOYMENT OF THE CHASE AND PERHAPS THE EVENTUAL CAPTURE OF HIS QUARRY.BUT SOLELY FOR THE HORNS.SOMETHING THAT THAT INDIVIDUAL CAN SAY HE CAUGHT IN MONTANA AND THEN MAKE UP SOME LUDICROUS STORY OF THE CHASE.LETS GET RID OF THESE APPLICANTS AND ANYONE ELSE WITH SIMILAR IDEAS.SEND THEM BACK TO WHEREVER THEY CAME FROM!!!!

LEE OLSON 443-3342
216 WALLACE
HELENA

GAME FARM LICENSE SCOPING MEETING
COMMENT SHEET
(Please write legibly)

NAME: Tilly Murphy

ADDRESS: Murphy Ranch (Sheep Creek)

Issue(s) you feel need to be examined or are not currently being considered. Please be specific and explain why you believe the issue(s) need to be considered:

don't want game farm - he just want to bring people in to hunt out of warden's sight
need to protect the elk - she helped get those elk in the area established - introduced from YNP (Earl Andridge)
game farm will just take wild elk/game.
fenced in elk + deer become sick animals - don't need any red deer from Florida
her two sons, Earl and Bob, still run her ranch

(Use back side if additional space is needed)

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

Mrs. A. L.Fay
611 9th Ave.
Helena, Mont. 59601
SEPTEMBER 15,1994

The Helena Resource Area Office
Montana Dept. of Fish, Wildlife & Parks
1420 East 6th Ave.
P.O. Box 200710
Helena, Mt. 59620-0701

Re: Game farm•Bear Tooth Mountains

To Whom it may concern:

I am not a hunter but I had a father that loved to hunt and loved the challenge of catching big game. This was not only hard work and good sportsmanship, but it took ingenuity, perfect timing, safety, endurance, and many times, disappointment. This game was used to raise his four children and any guests that happened by...plus a few grandchildren. I did not understand this when I was a child, I thought surely, he had shot Bambi.

He also was an avid fisherman, and bird hunter.

Now I read in your advertisement of "game farm" and indeed it is properly named. What is sportsman-like about shooting fish in a barrel except perhaps the "MONEY", someones EGO fulfilled? Game for some out-of-stater that thinks that is what hunting is all about? I'm glad my dear father is not here to see what has happened to the state of Montana. It's hard enough for the rest of us to swallow.

Is Montana so hard up it needs this kind of business?

Because of an emergency in our family, this letter is a little late, but thankyou for letting me express my views.

Sincerely,
Mrs. A. L. Fay

p.s. It's Too bad my Father is not alive- He would have a much more colorful version—

Mr. & Mrs. Ronald Ries
Rt. 3 Box 320-A
Conrad, Montana
59425

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

September 11, 1994

Attention Steve Lewis.

We the undersigned are definitely opposed to a game farm on the Beartooth Mountain.

Our concerns are:

- Game animals from the farm will likely escape and are nearly impossible to recapture

- Disease could be introduced to our native wildlife

- Breeding of native wildlife with foreign and exotic game farm animals

- Have mixed feeling towards velveting operation and fenced shooting preserves

Thank-You

Ronald Ries
Deborah Ries
Brenda Ries
Christopher Ries

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

Great Falls, Mt.
Sept 13th 1994

Dear Sirs:

I am against the proposal to license a game farm in the Beartooth Mountain area.

We have a healthy elk, sheep, goats and deer population on both sides of Holter Lake, and there's always a chance of game farm animals giving disease to the wild ones when they escape.

I am also against a velveting operation, it is cruel & inhumane. Elk & deer are wild creatures and should be left as such.

I am sure that the person who had funds enough to buy this large ranch can make a nice living off cattle & other domestic animals.

I have enjoyed the hunting in Montana for over 50 years

and 2d Date the thought of it being reminding some faithful act.

Yours truly
Norma Ferguson

HUNTER WARNING: Members of the Russell Country Sportsman's Association are warning hunters about the possibility of being exposed to bovine tuberculosis.

In humans, the disease can cause "indulant fever." Symptoms are periodic chills and fever, accompanied by severe headaches. Once the symptoms set in, it might take the victim several days to recover, according to a statement from the local sportsmen's organization.

Things to look for before field dressing an animal are lesions anywhere on the animal or small lesions on or around the genital area. The association recommends that hunters should not dress animals if lesions are found and hunters should contact a game warden.

Last month the Montana Department of Livestock and Fish, Wildlife and Parks began a study of the probability of the disease spreading in wild animal populations in Bighorn County.

Tuberculosis in captive elk at the game farm was first confirmed in 1993. Elk on the ranch have and are continuing to undergo testing, according to FWP officials. By law, those animals testing postive must be destroyed.

For further information, contact the association by calling Gary Myrum at 454-1655 or Ed Johns at 761-8627.

1905 Mountain View Drive
Great Falls, Montana 59405
13 September 1994

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

Helena Resource Area
Montana Dept. of Fish, Wildlife & Parks
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Subject: Comments on proposed game farm on Bear Tooth Mountain

According to the Notice of Public Meeting which appeared in the Great Falls Tribune, the public may make comments on the proposed game farm, so I hereby submit mine. I vehemently oppose the granting of a permit to establish a game farm in the Bear Tooth (Sleeping Giant) area for the following reasons.

1. The practices proposed, as described by the article in the Great Falls Tribune, are immoral and inhumane, to say the least. Shooting animals within a half mile square area would be like using penned domestic animals for target practice.Sawing off antlers still in the velvet certainly cannot be considered a humane practice, and it is a shameful thing to do for the purely mercenary reason of appeasing the demand of Asiatics for aphrodesiacs.

2. The location of the proposed game farm is in an area near a wilderness area, a proposed wilderness area, and the Bear Tooth Wildlife Management Area. It represents further encroachment into natural habitat for elk and mule deer.

3. There have already been problems with existing game farms--reference the charging of the game farmer in the Checkerboard area recently and the newspaper reports over the last year or so about the spread of tuberculosis from game farm animals to the wild population. Why add to the problems?

4. It appears to me that this is just another case of an out-of-state person wanting to take advantage of Montana in just another get-rich-quick scheme. Montana's resources should not be wasted in such a manner.

I urge the Montana Department of Fish, Wildlife and Parks to deny a permit for this operation. I see no good to come of it. Thank you for your consideration of this metter.

Marian J. Setter
MARIAN J. SETTER

Helena Resource Center
Dept. Fish Wildlife & Parks
1420 East 6th Ave
Helena, MT 59620-0701

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 8

Great Falls, MT
Sept 15, 1994

Gentlemen:

Reference the Game Farm proposal in the Sleeping Giant area. I offer the following comments in opposition to the proposal and for your consideration in preparing the EIS:

1) Past experience with Game Farms in Montana indicates they are impossible tomake fail safe.
2) Tuberculosis has apparently allready been introduced into native wild - life populations.
3) Genetic contamination has allready invaded our native elk population as result of game farm operations.
4) The Shooting Preserve proposal can trigger an anti hunting reaction ag- against Montana Sportsmen. Many citizens abhor such a hunting concept, including many sportsmen. The concept is entirely foreign to the quality hubting concept that Montana is known for.
5) Private landowners make much of their right to do as they please with their private land and property, however, the public's rights should not be diminished by actions on private lands. It is virtually impossible for the Department to insure that public rights will not be diminished.
6) What will be the State's liability if suit is brought against the Department if a worst case scenario results? Who will pay? Sportsmen?

Respectfully,

George N. Engler

George N. Engler
2412 5th Ave South
Great Falls, MT 59405

Sept 14, 1994

Helena Resource Area
Mt. Dept Fish Wildlife, + Parks,
PO Box 200701
Helena, MT 59620-0701

RECEIVED
SEP 16 1994
FISH, WILDLIFE & PARKS
REGION 4

Dear Sirs: Re: Game Farms

This is to oppose approval of a Game Farm in the Sleeping Giant area — or any Game Farm in Montana, old or new.

There are many reasons — in particular introduction of new genes, tuberculosis or other diseases and the selling of game, mutilation of the animals for the purpose of selling antlers for the obsolete practice of aphrodisiacs by Orientals —

So me is seems wrong to pen up these magnificent animals,

Let's join the 20th or 21st century and join Wyoming in abolishing this practice.

Sincerely

Gracia A. Hilde

Mrs. Gracia A. Hilde
349 Fox Dr. #16
Great Falls, MT 59404

Steve Lewis Sept 7, 94

Greetings

I strongly oppose the Game Farm being proposed in the sleeping giant area, we don't need more game farms, we need to get rid of the ones we have now. we are on the verge of destroying our natural wildlife herds now, from Game farming; our natural herds are alot more important two all of us, than game farms, thank you for the chance to comment.

Sincerely

John Beasley

8 Shamrock Lane

Lit Falls Mnt 56345

September 13, 1994

Department of Fish, Wildlife, and Parks
1420 East 6th Ave., P.O. Box 200710
Helena, Montana 59620-0701

Sir/Madam:

I would like to express my extreme opposition toward the granting of a license for the proposed game farm to be located on Sleeping Giant Mountain.

I believe it is time for the State of Montana to put a stop to this ever increasing threat to our wildlife. Let's join the progressive leads of our neighboring state, Wyoming, and outlaw game farms before it's too late. Montana should not always be lagging behind logical measures such as this one. Why do we treat such a valued resource with such contempt? Has not the spread of TB to wild herds been documented? Why then does the Department of Fish, Wildlife, and Parks continue to allow such a threat to exist? While the state bends over backwards to protect livestock (site the destruction of Yellowstone bison who are only alleged to spread brucellosis to domestic animals) our game animals enjoy no such protection. Is not that the mission of FWP?

My son and I have hunted elk and deer herds which are known to frequent the area of this proposed game farm. While the rest of our beloved Montana lifestyle crumbles around us it is sad to see one of the strongest traditions, hunting, being threatened to allow out of state "armchair hunters" to come in and shoot penned in elk. Our game animal herds are just that: OURS! Your job as the FWP is to protect those herds for us. Please, sir/madam, do your job and reject this license application now and push for legislation in 1995 which will not allow any new game farms in our state.

Thank you very much.

Sincerely,

William Ramsay

William Ramsay
P.O. Box 604
East Helena, MT 59635

Sept. 12,1994

To Dept. of Fish Wildlife and Parks and the
Party proposing a game farm near Sleeping Giant.

I have been a Montana resident for 24 wonderful years. During this time I have never seen such a sad occasion as when you folks had to kill 150 of our fine game animals recently in southeast Montana because of game farm tuberculosis. Now..here we go in an area where I have hunted and shot plenty of elk the past 11 years. Some fools want to grow elk and deer and sell them to lazy slobs who have nothing to do but spend their money and have someone point out a penned animal for them to shoot. How stupid..let alone the fact some of these animals may be diseased long enough before it's discovered to pass the diseases on to the wild animals in this area. It stands to reason elk and deer will come from the wild in this area to rub noses and smell of the animals in the enclosure. Then they will be infected by these inferior penned and pathetic excuses for beautiful wild and FREE creatures.. not even with a 10-foot high concrete fence completely surrounding this place would I say OK to this idea. Another game farm was recently approved for the Helena area if I recall correctly. Enough is enough. You give all of us who believe in fair chase and hunting a real bad name with your damn game farms. Let's put a moratorium on these stupid things. Let's get the notion of the almighty dollar being a good match with penned big game hunting as well as guiding and outfitting out of this sport...to this proposal I say not only NO...BUT HELL NO. To this letter I gladly give you my phone number and address in case you (either party) have any questions for me. And let's get the idea game animals are a good way to make money out of our stupid human minds. The creator of all didn't put these animals here for us to raise as a cash crop. I suggest the people who propose this idea get the hell out of ranching and farming if they can't make a living by conventional agricultural means because this crap won't do much to help them either. Real Montanans will find this proposal deserves the proper fate....tossed into a compost pile. Maybe by letting hunters into this place during the regular season these folk could cut the game numbers eating their grazing land enough to make a living with cattle....apparently the way things are at present something isn't working.

Dick Shreves

Dick Shreves
1800 Laurel
Helena, MT 59601
443-4667

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 4

JAMES, GRAY & McCAFFERTY, P. C.

A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
TAX ID NO. 81-0488095

DENNIS McCAFFERTY
ROBERT F. JAMES
RANDALL H. GRAY
DARCY CRUM
LESLIE S. WAITE, III

WILLIAM O. BRONSON
BERT A. FAIRCLOUGH
MATTHEW HUTCHISON
RETIRED:
TED JAMES
ORVILLE GRAY (1920-1993)

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 8

7/15/94

September 13, 1994

Helena Resource Area
Montana Dept. Fish, Wildlife & Parks
1420 East 6th Ave.
P.O. Box 200701
Helena, MT. 59620-0701

RE: game farm license on Beartooth Mountain

Dear Department:

Kindly enter my letter as one adamantly OPPOSED to granting the above, or any other game farm license in Montana.

My family has been in this State for over 110 years. I stay by choice because of the wonderful resources I have come to know, many of which are under the management of FW & P. The high risk of game-farm-caused genetic pollution to indigenous species for the short term profit of a few makes this business particularly offensive. Gifford Pinchot, the founder of the US Forest Service, said it best when he said the public trust should be managed "for the greatest good of the greatest number in the long run." The game farm industry should be judged by this standard.

No performance bond could be of sufficiently high amount (if one is even required for this business) to cover the true cost of the negligent mixing of the domestic gene pool with the wild one. The incentives and rewards for intentional abuse of game farm licenses have obviously been too great to resist for several of those so licensed in this State. The history of the industry is fraught with such abuse. That is not to say that the current applicants would intentionally violate a license. The point is, why risk this resource that belongs to all and which cannot be replicated once ruined, for the potential benefit of a few license holders.

Through decades of tremendous foresight, substantial investment and input from hunters and those interested in wildlife, the wildlife population has been meticulously preserved and managed. All of this has been for the benefit of the indigenous species and the human population of this Great State. To grant this or any game farm license

is to suddenly change management direction, in a manner that I suspect is contrary to the wishes of that vast segment of Montanans who know and appreciate our wildlife resources.

The application should be DENIED.

Yours very truly,

JAMES, GRAY & McCAFFERTY, P.C.

Randall H. Gray

Randall H. Gray
Direct Dial Number
(406) 454-5706

RHG

2725 - 8 Ave. No. #5
Great Falls, MT 59401
September 13, 1994

Helena Resource Area
Montana Fish, Wildlife & Parks
1420 - E. 6 Ave.
P. O. 200701
Helena, Mt 59620 - 0701

Gentlemen:

I am totally opposed to game farms, and feel there should be no license issued for the Sleeping Giant Elk Ranches.

Game farms should be banned entirely in Montana for many reasons, including: danger of escaping red deer and breedingwith our native elk population, and spreading disease to our animals.

I understand Wyoming has banned game farms. Why is Montana so lax in protecting our native animals?

Sincerely yours,

Carley McCaulay

Carley McCaulay

Allen W. Tudor, P.E.
4212 Fifth Avenue North
Great Falls, MT 59405
(406) 453-2733, FAX 761-6969

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 8

September 11, 1994

Helena Resource Area
Montana Department of Fish, Wildlife & Parks
1420 East 6th Avenue
P.O. Box 200701
Helena, MT 59620-0701

re: proposed licensing of game farm on Beartooth Mountain

I would like the following comments to be made part of the minutes of the public scoping meeting regarding issues to be considered in the proposed licensing of a game farm in the vicinity of Beartooth Mountain.

Historically, the indigenous wildlife of this state has been considered state property to be managed by the state in the interests of and for the population of Montana. It is obvious that wildlife cannot exist without suitable habitat and if the license for this proposed game farm is granted, what replacement habitat will be made available for the displaced wildlife?

Secondly, the applicant also proposes to engage in a velveting operation. While the term "velveting" is not defined in the notice, I take it to mean that the antlers will be removed from adult *cervidae* for sale. This activity can only be considered as part of the worldwide commerce in the marketing of animal parts such as the gall bladders and claws of bears, rhinoceros horns and elephant ivory. Exploitative marketing practices of animal parts have led to the near destruction of several animal species worldwide within the past two decades and continue to pose a threat to the continued survival of many animals such as the rhinoceros. Any participation in this market is reprehensible.

While velveting may be legal in Montana, it is questionable whether contemporary resource management decisions of Montana can and should be made without regard to the larger worldwide resource issues. Any review of the application for this license should include consideration of the velveting activity in the context of pandering to the world market in animal parts for esoteric purposes which has proven to be detrimental to the survival of many species of wild animals.

Sincerely,

Allen W. Tudor

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 8

Bill R. Martin
243 17th Ave. S.
Great Falls, Mt. 59405

September 12, 1994

Helena Resource Area
Mt. Dept. F.W.P.
1420 East 6th Ave.
Helena, Mt.59620

Dear Sirs:

This letter is to protest the granting of a license for a game farm in the Sleeping Giant area north of Helena.

This is a pristine area, and primary use of this land is wildlife and cattle grazing and should not be changed.

Game farms historically have become contaminated with tuberculosis and brucellosis that will spread to wildlife and the domestic livestock utilizing the surrounding areas.

I do not believe the promised 8' fence will keep farm elk in, or wild elk out. Anyone who thinks so, has not tried to fence elk out of hay yards, or seen bull elk when they catch the scent of cow elk in season. The perfume of estrous is irresistable to a bull elk and he has no respect for fences.

The above reasons and my native Montanan aversion to domestication and exploitation of wildlife prompt me to protest vehemently the granting of this licence.

Thank you,

Bill R. Martin

Bill R. Martin
Senior Native Montanan

Having read the Sleeping Giant game farm proposal article by Mark Downey on Wednesday Sept. 7 is indeed controversial at the least.

After having to move cattle to different pasture in south central Montana last summer we had the misfortune of having a game farm next to the cattle. The game farm had some elk that tested positive for Tuberculosis (TB). With Montana being TB free this poses a serious threat to the livestock (domestic and wild) industry of the State. The elk were surrounded by an 8 foot fence but were able to escape during the rut to challenge wild elk with cattle mixed in with them.

Once the TB was detected several hundred cattle had to be tested for the disease by the state and local veterinarians and technicians. Our cattle were confined for over 3 months until they were cleared. Forcing us to miss out on good market prices for once as we were unable to sell any cattle until they were cleared. So the idea that cattle contaminating the elk as the article stated is laughable considering what we went through.

Some questions that do need to be addressed are:

1. Which agency will take the responsibility for the inspection of the game farms? Fish, Wildlife and Parks as the elk fall in their domain or the State Livestock Inspectors since the elk will be used as livestock?

2. Will the elk be tested as cattle have to be tested before they can be transported into or across our state to ensure that Montana remains TB free?

3. If allowed to operate the game farm and our experience with elk being able to escape an 8 foot fence wouldn't different rules for their enclosure be appropriate?

4. Cutting off the antlers while they are still in the velvet for sale is nauseating to those of us who raise livestock. To willingly make the animals suffer and get possible infections for profit is appalling. Also there is a world conference going on now to reduce the worlds population so why promote promiscuity?

5. No convicted felon can operate a game farm in the State according to the law, but hearing officer Dennis Moreen saw the good samaritan in Guthrie. Someone willing to plead guilty to a felony conviction for an employee who was embezzling funds? No innocent person in their right mind would do such a thing so is it possible a deal was struck in Guthrie's favor? Does the law state if you did it for the company and not yourself then it is O.K. to run a game farm?

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 8

Robert De Vries
Rt 1 Box 10
Conrad, Mt
59425
278-5506

Dear Lewis Sept 7, 94

Greetings

I strongly oppose the Game Farm being proposed in the Stepping Giant area, we don't need more game farms, we need to get rid of the ones we have now. We are on the verge of destroying our natural wildlife herds now, from Game farming, our natural herds are alot more important to all of us, than game farms, thank you for the chance to comment.

Sincerely

Gail Beadle

8 Shamrock Ave

Lit Falls Mont. 59405

Date: 09-12-94 (15:19)
To: FWP SYSOP
From: CHET MILLER
bj: ELK FARM
Read: NO
Conf: FWP (1)

Number: 56 of 56 (Refer# NONE)

Status: RECEIVER ONLY
Read Type: MAIL FOR YOU (A) (+)

WITH ALL THE TROUBLE WE ARE HAVING WITH SOME OF THE ELK FARMS IN PRIME ELK HABITAT I DO NOT FEEL WE NEED ANOTHER ONE NEAR THE SLEEPING GIANT. PLEASE DENY ANY PERMIT FOR THIS NEW ELK FARM. THANKS.

(9996 min left), (H)elp, End of Message Command?

PCBoard (R) v15.1/25

16:26

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 4

Sept. 9, 1994

Helena Resource Area
Mont. Dept. of Fish, Wildlife & Parks.
1420 E 6th Ave.
Helena, MT.

Dear Sirs:

We would like to registor our adamant opposition to license a game farm on Beartooth Mountain.

None of these game farms should be allowed as far a we are concerned. We believe it is stupid and terrible to treat wild animals this way.

Yours truly,
Thomas C. Waterman
Judith O. Waterman

Thomas C. Waterman
1117 Cheyenne Rd
Helena, MT. 59601-6520

Sept. 1, 1994

Neil A. Beaucar, Area
Montana Dept. of Fish, Wildlife & Parks
1420 East 6 Ave. P.O. Box 20071
Helena, MT. 59620-0701

RECEIVED
SEP 1994
FISH, WILDLIFE & PARKS
REGION 4

Dear Sir:

I do ~~not~~ oppose of any "Game Farms", and I defiantly feel all requests for permits to establish a Game Farm on any public land or mountain area should be denied.. I am requesting you to deny the permit for the farm on Beartooth Mountain (Billings Herd).

These farms are detrimental to the animals and public lands as just that "for the people" not just one individual

Thank you.

Lori Buckner
305 - 7th Ave. S.W.
Great Falls, MT. 59404

509 2ND ST. N.W.
GREAT FALLS, MT 59404
SEPTEMBER 7, 1994

STATE OF MONTANA
DEPT. OF FISH, WILDLIFE & PARKS
BEARTOOTH GAME FARM COMMITTEE
1420 EAST 6TH AVE.
HELENA, MT 59604

DEAR COMMITTEE MEMBERS:

WE ARE QUITE CONCERNED ABOUT THE PROPOSED GAME FARM NEAR BEARTOOTH MOUNTAIN BUT WILL NOT BE ABLE TO ATTEND THE MEETING IN HELENA THIS SEPTEMBER 15TH.

OUR FEAR IS THE POSSIBLE EFFECT IT COULD HAVE TO THE PRESENT ELK AND DEER POPULATIONS IN THE ADJOINING AREAS -- MAINLY THE BEARTOOTH GAME RANGE. WE ARE BOTH AVID HUNTERS AND RECREATIONALISTS IN THIS AREA. OWNING A CABIN AT HOLTER LAKE AND MAINTAINING THE BLUEBIRD HOUSES ON THE BEARTOOTH HAS GIVEN US A VERY DEEP APPRECIATION FOR THE WILDLIFE IN THIS BEAUTIFUL AREA.

WE BOTH STRONGLY OPPOSE GAME FARMING. THERE IS THE POSSIBILITY THAT IT COULD CAUSE THE END TO OUR PRESENT WILD ELK AND DEER HERDS ENTIRELY THROUGH THE SPREAD OF DISEASES AND GENETIC ALTERATIONS. THIS IS TOO GREAT A THREAT TO JUSTIFY THE FINANCIAL BENEFITS A HANDFUL OF BUSINESSMEN WILL GAIN.

HOW OFTEN IS THE GAME FARM "GATE" ACCIDENTALLY LEFT OPEN? OUR ELK AND DEER HERDS HAVE ENOUGH PRESSURE TO CONTEND WITH FROM DAILY ENVIRONMENTAL CHANGES WITHOUT HAVING TO FACE THE RISKS RELATED FROM GAME FARMS. PLEASE STRONGLY CONSIDER NOT PERMITTING THIS ESTABLISHMENT IN THIS AREA.

SINCERELY YOURS,

Nancy C. Woolard
Frank Bushell

NANCY C. WOOLARD
FRANK BUSHELL

Montana Dept of Fish Wildlife and Parks
P O Box 200701
Helena MT 59620-0701

RECEIVED
1994
FISH, WILDLIFE & PARKS
REGION 4

Re: Proposed Game Farm on Beartooth Mountain

Dear Sir or Madam:

I am writing regarding the proposed game farm to air my concerns. My first reactions is negative due to the location of the farm. This area is a tourist attraction and I would not want anything to detract from this. Second, the shooting preserve concerns me as well. The third item of concern is the health of "farmed" animals and the control of any dieases they could contract and share with the wild population. Having little knowledge of the "velveting operation" I can only assume it is a harvesting process and seems like an unnatural process for the animals.

Other concerns are the types or species of animals being raised on the farm. Are they native to Montana or imported from other parts of the country? Is this area being zoned for a commercial operation and appropriate taxes being imposed? Is this area currently hunted and is public access for hunting to be restricted or made available by permit?

I regret I will be unable to attend the meeting in Helena, but would attend if a meeting were to be held in Great Falls. These are few of the items of concern to me and I am sure there will be other considerations brought to light at such a meeting.

Sincerely,

Kris Sapp

Kris Sapp
907 Ave D. NW
Great Falls, MT 59404

John L. Stoner
63 River Road
Townsend, MT 59644

Sept. 6, 1994

Helena Resource Area
Montana Dept. of Fish, Wildlife, and Parks
1420 East 6th Ave.
Helena, MT 59620-0701

Dear Sir (s);

The following are my comments on the proposal to license a game farm on Beartooth Mountain (Sleeping Giant Mountain) in the Southwest ¼ of Section 16 and section 21, Township 13 North, Range 3 West, Lewis and Clark County, Montana.

A license SHOULD NOT be granted! Can't you people see the problems the current game farms are causing? Aren't you people aware of the hundred plus deer (not to mention other animals) that your FWP people have just shot outside of one of the current game farms, not to determine IF but HOW BAD the spread of disease is .....disease spread from the game farm animals to Montana's wild population. Haven't you people heard about the escape of "Red" elk from the game farm over around the Avon area? How can you people even consider allowing another game farm to open?

Instead of issuing any new licenses for game farms, you people should be getting your act together and start cancelling the game farm permits that are out there now! For just once, JUST ONCE, listen to your FWP biologist. You are paying them big bucks to gather information on our game herds, so put aside your petty differences, listen to what the biologist have to say, then for the sake of future generations of Mont. hunters turn this latest application for a game farm down, AND start getting rid of the ones we have now.....before it is too late!!!!

Thank you.

John L Stoner

John L. Stoner